



Driving Innovation in Crisis Management for **E**uropean **R**esilience

D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report

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Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	2 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

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Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	3 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

Table of Contents

List of Acronyms	7
Project Description	8
Executive Summary	9
1 Introduction	10
2 Methodology and limitations.....	12
3 Structure of the studies - Overview	15
4 Exemplary analysis of collected data	17
4.1 Policy and Strategy focus	17
4.2 Centralised vs distributed crisis management.....	18
4.3 Volunteer involvement	18
4.4 Post-disaster assessment and Lessons Learned systems	18
5 Outlook: work in progress.....	20
5.1 Professional response	20
5.2 Resilience	21
5.3 Innovation capacity.....	21
6 Conclusion.....	22
References.....	23
Annex 1: List of created studies	25
Annex 2: Template of the studies that has been used as a guideline by the partners/ authors	27
Annex 3: Individual Country / IO studies.....	38
EUROPEAN UNION ORGANISATION Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response.....	39
UNITED NATIONS (UN) Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	104
CIV-MIL Armed Forces' Support to Civilian Authorities Study Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) of using armed forces in crisis management and disaster response	166
AUSTRIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	209

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	4 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

BELGIUM Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	271
B U L G A R I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	333
CROATIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	403
CYPRUS Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	466
DENMARK Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	538
E S T O N I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	600
FINLAND Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	653
FRANCE Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	708
G E R M A N Y Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	770
GREECE Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	803
H U N G A R Y Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	840
IRELAND Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	875
I T A L Y Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	925
LATVIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	985
LITHUANIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1028
LUXEMBOURG Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1068
MALTA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1125
THE NETHERLANDS Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1172

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	5 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

P O L A N D Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1248
P O R T U G A L Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1287
R O M A N I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1334
S L O V A K I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1406
S L O V E N I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1441
S P A I N Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1508
SWEDEN Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1542
U N I T E D K I N G D O M Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1574
ALBANIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1649
ISRAEL Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1702
MONTENEGRO Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1735
NORWAY Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1788
TURKEY Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1813

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	6 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

List of Acronyms

Abbreviation / acronym	Description
Civ-Mil	Civil-Military
CM	Crisis Management
PLOPC	Policy, Legislation, Organisation, Procedures & Capabilities
IO	International Organisation
NGO	Non-Governmental Organisation
MS	[EU] Member State
PoES	Portfolio of emerging solutions
R&D	Research and Development
UN	United Nations
SP	Subproject
WP	Work Package

Project Description

DRIVER evaluates emerging solutions in three key areas: civil society resilience, responder coordination as well as training and learning.

These solutions are evaluated using the DRIVER test-bed. Besides cost-effectiveness, DRIVER also considers societal impact and related regulatory frameworks and procedures. Evaluation results will be summarised in a roadmap for innovation in crisis management and societal resilience.

Finally, looking forward beyond the lifetime of the project, the benefits of DRIVER will materialize in enhanced crisis management practices, efficiency and through the DRIVER-promoted connection of existing networks.

DRIVER Step #1: Evaluation Framework

- Developing test-bed infrastructure and methodology to test and evaluate novel solutions, during the project and beyond. It provides guidelines on how to plan and perform experiments, as well as a framework for evaluation.
- Analysing regulatory frameworks and procedures relevant for the implementation of DRIVER-tested solutions including standardisation.
- Developing methodology for fostering societal values and avoiding negative side-effects to society as a whole from crisis management and societal resilience solutions.

DRIVER Step #2: Compiling and evaluating solutions

- Strengthening crisis communication and facilitating community engagement and self-organisation.
- Evaluating emerging solutions for professional responders with a focus on improving the coordination of the response effort.
- Benefiting professionals across borders by sharing learning solutions, lessons learned and competencies.

DRIVER Step #3: Large scale experiments and demonstration

- Execution of large-scale experiments to integrate and evaluate crisis management solutions.
- Demonstrating improvements in enhanced crisis management practices and resilience through the DRIVER experiments.

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Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	8 of 1872	
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

Executive Summary

New solutions, technical and non-technical, provide strong opportunities to improve crisis management (CM), while successful operationalization of new solutions essentially depends on their compatibility with framework conditions such as organisational, legal, and political aspects in the respective area.[1] The knowledge about those framework conditions is thus essential to optimize the innovation potential of emerging CM solutions.

The document at hand presents a report on CM Organisations, capabilities, policy and legislation. Formerly in the original DOW it appeared as D82.11 and D83.11.

It provides a unique collection of “Supporting information on CM systems” of EU Member States (MS), EU-level, and UN-level as well as of those countries concerned by the DRIVER scenarios. It serves as non-technological performance conditions and criteria for the DRIVER solutions, as well as a support to the test-bed design (SP2) and to the design of the experimental campaigns (incl. the development of the scenarios) in SP6. Next to the objective of receiving most realistic scenarios for the testing of new CM solutions, at a later stage in DRIVER the analysis of framework conditions aims at developing experience-based recommendations for different types of stakeholders such as incident commanders and policy makers of the EU and its MS.

Since there is an inextricable link between the activities of the DRIVER WP82 and WP83, a combined template covering the high level-analysis required in both task 82.1 (“Crisis Management Processes & Organisations”) and task 83.1 (“Policy & Governance”) has been developed (see also D81.1 SP8 Work Plan [2]). Thus, the conducted studies of EU MS, EU- and UN-level as well as of selected additional countries include information on CM Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC). Taking into account the general DRIVER perspective, special attention was given to (a) the national level, (b) cross-border and bi- or multilateral cooperation and (c) decision-maker related data. In addition, CM related Civil-Military cooperation in the different countries has been examined. In total 36 individual studies have been created, to be found in Annex 3.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	9 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

1 Introduction

Natural and man-made hazards, their variances and broad range of possible impacts on society, critical infrastructures, environment or economy, perpetually induce new challenges for crisis management. These challenges must be met by constant improvements and adaptations of the crisis management process, to ideally be able to cope with complex disasters in the best possible way at any time. New technical and non-technical solutions play a crucial role in this regard, providing strong opportunities for improving crisis management capabilities and thus societal resilience.

Whether new solutions are implemented in crisis management, if they actually strengthen resilience, as opposed to rather triggering negative secondary impacts or providing no real added-value, strongly depends on conditions such as relevant organisational, legal, and political framework conditions.[1]

As part of the old Subproject 8 “Supporting information”, this survey is intended to provide high-level information on CM procedural, organisational and institutional structures (related to task 82.1) as well as on policy and legislation aspects (related to task 83.1) in all EU MS, EU-level, and UN-level as well as of those countries concerned by the DRIVER scenarios. Furthermore, information on procurement processes have been gathered to, in a later stage, support the exploitation of the Portfolio of emerging solutions (PoES) and of the DRIVER Test-bed (related to T82.1). In addition, a separate study on civil-military cooperation in CM has been conducted (related to T83.1).

Crises addressed within the scope of DRIVER are major disasters (natural or man-made) that require coordination between or assistance from other MS, i.e. exceeding the crisis management capacity of one nation or affecting more than one MS. The information gathered during this high-level analysis therefore focuses primarily on this type of crisis. This excludes other types of crises, like “financial crises” or war-like crises.

Objectives:

The survey describes and analyses the high-level CM Policy, Legislation, Organisation, Procedures & Capabilities of EU MS, EU-level, and UN-level as well as of those countries likely to be affected by the DRIVER scenarios. The gathered information is intended

1. to support the experimentation by serving as non-technological performance conditions and thus, **support the test-bed design in SP2** and consequently, **the development of the DRIVER Portfolio of Emerging Solutions (PoES)**
2. to later **support the development of the scenarios and the execution of Joint Experiments (JEs) and the Final Demo (FD)** in SP6
3. to support the **preparation of recommendations for the EU and MS** on how to benefit from the DRIVER-results to strengthen CM structures and improve common preparation and operations and thus, European resilience.

The compatibility of a CM solution to CM context factors can be optimized from both sides. While on the one hand, the information contained in the report at hand supports the later development of

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	10 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

recommendations to different stakeholders in the EU and its MS, it also serves the solution providers in DRIVER as valuable information on how to optimize their products and services.

To fulfil the above mentioned objectives, the country/international organisation (IO) studies needed to (a) provide information with specific use for the solutions tested in the thematic areas of DRIVER (SP3 Civil Society Resilience, SP4 Strengthened Responders, SP5 Training and learning) and (b) be structured in a way that allows a comparison of certain aspects among the different studies.

While studies on some CM systems already exist, like the results from the FP7 project ANVIL – Analysis of Civil Security Systems in Europe¹, they could not meet the before-mentioned needs as in general they have a different focus. For instance, ANVIL covers only 17 of the 28 MS, Mediterranean countries relevant for the DRIVER scenarios are missing as well as the EU- and UN-level. Nevertheless, these studies already provided some valuable input and have been used as resources for some of the studies.

¹ <http://anvil-project.net/>

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	11 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

2 Methodology and limitations

Methodology

Comparing the work plan and objectives of WP82 (“CM Institutions & Capabilities”) and WP83 (“Governance”), it was obvious that both WPs should cooperate and perform their work in parallel where reasonable, to optimize the results and to avoid any duplication. Both WPs conduct high-level analyses on national as well as on EU- and UN level: WP82 concentrating on CM procedural, organisational, and institutional structures, WP83 concentrating on CM policy and legislation. These issues are closely related, and it made most sense to gather the respective information together.²

Moreover, it has been decided that each country / international organisation analysed in this survey should be covered by only one partner for all subtasks. The main purpose has been to avoid that DRIVER relevant stakeholders are contacted by different partners within DRIVER in a short time frame. In addition, this decision aimed to avoid duplication of work, too much coordination needs between partners, and to perform work more efficiently.

In order to provide the supporting information laid down in the objectives of this survey in a most useful way, the responsible DRIVER partners of the receiving SPs have been consulted. This consultation of SP2-5 in month (M) 3 of DRIVER with regard to their information needs, to be considered in the high-level analysis, was done by a functional requirements analysis (see also D81.1 SP8 Work Plan Annex 1 [2]). It became evident that for many of the contacted WPs, it was too early in the project period to define clear information needs from WP82 and WP83.

To better meet the objectives and requirements of SP8 to provide supporting information, it has been therefore decided to expand the efforts in the updated tasks in M25-29 (task 82.2 and task 83.2), mainly planned to update information with regard to the information needs in the scenario design of the Joint Experiments and of the Final Demo in SP6 (SP6 started in M11), and to reduce the original scope of task 82.1 and task 83.1.

As a result, the high level analysis in the first phase (tasks 82.1 & 83.1) provides the recipients of the deliverables with a general overview on CM PLOPC – in short for the information to be gathered in WP82 and WP83, including amongst other Procurement aspects and Civil-Military aspects, covering the EU MS, selected additional countries and international organisations (EU and UN).

In contrast, the update phase (M25-M35) will be able to focus on more pertinent CM PLOPC issues identified by the receiving SPs, including the support of the development of the scenarios in SP6 as well as of the development of experience-based recommendations for different groups of CM stakeholders of the EU and its MS. Consequently, in the beginning of these update tasks 82.2 and

² As a result, the two work packages have been merged during the restructuring process of DRIVER at the end of 2015 into the WP88 “CM policy context and recommendations” of the new SP8 “Assessment & Innovation”.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	12 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

83.2³ in M25, a second round of the functional requirements analysis will be conducted consulting the receiving SPs and WPs.

Based on the above mentioned scope of the high-level analysis and by the review of the results of the first consultation of the partners in SP2-5, a common template for the reports D82.11 has been developed (see Annex 2) and has been used as a guideline for the country studies as well as EU- and UN-level. The template, including guiding notes for the partners, ensured the comparability of the gathered information on “Policy, Legislation, Organisation, Procedures & Capabilities” (PLOPC) in all relevant tasks of WP82 and WP83, and defined the structure of each country report (see chapter 3 Structure of the studies).

As a result, receiving partners are able to compare specific information from various countries very easily by evaluating the same chapters of the different studies.

Information on CM related Civil-Military cooperation in the respective countries has been gathered in a separate study, developed and conducted by CSDM.

The work has mainly been done by desk top research, based on publicly available information. In addition, information gaps have been filled by conducting interviews with relevant stakeholders where possible.

As already stated, the studies cover issues on

Policy (e.g. risk assessment, strategy scope and focus, monitoring, analytical support and R&D, financing, policy review cycle, approaches to resilience, information sharing and data protection)

Legislation (e.g. CM concept, general crisis/ emergency/ disaster management law, emergency rule, department/agency-level and specific regional and local legal arrangements, regulations on the involvement of volunteers and specialised NGOs, as well as for international engagements of first responders)

Organisation (e.g. chain of command, cross-border operational cooperation),

Procedures (e.g. Standing Operating Procedures, national crisis management plans), and

Capabilities (e.g. human resources, materiel resources).

They further provide data on CM organisations’ **procurement processes** to support the exploitation of DRIVER solutions and the DRIVER test-bed.

For the respective country / IO studies, see the Annex 3.

³ Now T88.2 Update of supporting information on CM systems

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	13 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

Scope and limitations of the survey

Taking into account the available budget and time for the analysis while considering the objectives of the survey that mainly tend to support further work within in the DRIVER project, “high-level” has been defined as followed:

- national level
- cross-border, bi- or multilateral
- decision maker related

Budget and time constraints also need to be considered when assessing the scope and completeness of the respective studies, also due to varying extent of available online information or missing translations of e.g. policy and legal documents. Moreover, not always has it been possible to schedule expert interviews in the given time. This sometimes resulted in level headings that have been left blank. Next to the limited time and missing translations, this was in very few cases due to information that is not available to the public in general, so even the experts weren't allowed to give this information.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	14 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

3 Structure of the studies - Overview

Country / International Organisation: Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Overview

1 Policy

- 1.1 Risk Assessment
- 1.2 Policy and Governance
 - 1.2.1 Strategy scope and focus
 - 1.2.2 Monitoring and analytical support to policy making; R&D
 - 1.2.3 Policy for Prevention
 - 1.2.4 Policy for Preparedness
 - 1.2.5 Policy for Response
 - 1.2.6 Policy for Relief and Recovery
- 1.3 Financing
 - 1.3.1 Investing in preparedness
 - 1.3.2 Investing in consequence management
- 1.4 Policy review, Evaluation & Organisational Learning
 - 1.4.1 Post-Disaster Assessment
 - 1.4.2 Departmental Lessons Learned systems
 - 1.4.3 Centralised (national) Lessons Learned system
 - 1.4.4 International exchange for Lessons Learned
 - 1.4.5 Regular policy reviews
- 1.5 Resilience
- 1.6 Information sharing and data protection

2 Legislation

- 2.1 Crisis (emergency, disaster) management concept
- 2.2 General crisis (emergency, disaster) management law
- 2.3 Emergency rule
- 2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management
- 2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management
- 2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	15 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

2.7 Legal regulations for international engagements of first responders and crisis managers

3 Organisation

3.1 Organisational chart

3.2 Organisational cooperation

4 Procedures

4.1 Standing Operating Procedures and Guidelines

4.2 Operations planning

4.3 Logistics support in crises

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

5 Capabilities

5.1 Human resources

5.2 Materiel (non-financial) resources

5.3 Training

5.4 Procurement

5.4.1 Procurement regulation

5.4.2 Procurement procedures

5.5 Niche capabilities

Resources

For the **detailed structure including guiding notes** about the specific information requested under each heading, please see the template in the **Annex 2** that has been used by the authors as a guideline.

These guiding notes are a result of the functional requirements analysis of the SP2-5 (see also D81.1 SP8 Work plan Annex 1 [2]) and serve the objective to gather data relevant for a later implementation of DRIVER/CM solutions.

In addition, this template serves the other DRIVER partners to easily figure out, where valuable information can be found in the different studies.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	16 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

4 Exemplary analysis of collected data

This and the following chapter on “outlook” give an example of the use of the collected data in the country/IO organisation studies and have been taken from the publication in context with the Future Security 2015 [1].

The “high-level” studies, conducted for EU Member States, selected third countries, and on EU- and UN-level, cover topics on Organisation (e.g. chains of command, cross-border operational cooperation), Procedures (e.g. Standing Operating Procedures, national crisis management plans), and Capabilities (e.g. human/ materiel resources). They further cover Policy (e.g. risk assessments, analytical support and R&D, financing, policy review cycle, approaches to resilience, information sharing and data protection) and Legislation (e.g. general crisis/ emergency/ disaster law, emergency rule, specific regional and local legal arrangements, regulations on the involvement of volunteers, international engagements of first responders). They also provide data on CM organisations’ procurement processes to support the exploitation of DRIVER emerging solutions and the DRIVER test-bed. Besides general information, also first specific information needs for DRIVER solutions have been considered in the analysis.

As already stated, innovation processes in Crisis Management, i.e. a successful operationalisation of new Crisis Management solutions, strongly depend on the ability to be integrated in the respective framework conditions.

Those conditions can considerably differ between different nations, as shown in some examples below.

4.1 Policy and Strategy focus

Comprehensive crisis management includes measures for prevention and risk reduction, preparedness and protection of critical assets, maintaining capabilities and readiness to react to emerging crises quickly and manage their consequences, as well as measures to enhance resilience.

The surveyed countries recognise the need to comprehensively address crisis management requirements. For example, the aspiring EU member Albania recently introduced a comprehensive approach towards disaster risk reduction and management, including prevention, preparedness, response and recovery [3].

Some of the surveyed countries clearly emphasise the importance of one or another phase of crisis management. Countries like Albania, Belgium and Croatia emphasise response tasks and capabilities [3][4][5]. The strategy focus in Finland, on the other hand, is on preparedness and prevention rather than on response and recovery as a result of its low risk profile in terms of natural and man-made-disasters [6]. The policy of Austria puts a premium on preparedness issues like education and training of key response personnel, the promotion of new response technologies like decision support systems, simulation tools and also on an improved organizational framework for cooperation and coordination in the response phase [7].

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	17 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

While in some countries the concept of resilience is virtually unknown (and the term does not even translate easily in the respective language, e.g. Albania, Bulgaria), other countries strongly emphasise the importance of increased resilience of communities and societies. Such examples are provided by the Czech Republic, the United Kingdom, and other among the surveyed countries [3][8][9][10].

4.2 Centralised vs distributed crisis management

Practically all European countries implement distributed systems for crisis management. In practice, however, there are significant differences in views – and respective policies and budget allocation – on the role of the state versus the role of the local preparedness and response. Bulgaria, for example, still heavily relies on the centralised development of capabilities and financing from the state budget. The crisis management approach of Denmark, taken as an example to the contrary, assumes the local level to be better placed to tackle local crisis situations, than the national level, and relies heavily on the contribution of private organisations, volunteers and NGOs in Danish crisis management [8][11].

4.3 Volunteer involvement

The involvement of volunteers in crisis management strongly differs in various EU Member States, which has already been shown in previous studies [12][13]: In general, volunteering is strongly influenced by the history, politics and culture of a community and a country. There are countries with longstanding traditions and well developed voluntary sectors (e.g. Ireland, the Netherlands, UK) as well as countries with less developed voluntary sectors (e.g. Bulgaria, Greece, Romania). Also, volunteering has different weights on the political agenda (e.g. high in Austria, Germany; rather low in Bulgaria, Czech Republic), which lead to differences also in the level of volunteering. Moreover the general treatment, organisation and support of affiliated volunteers and voluntary agencies differ from country to country.

The studies at hand e.g. confirm (referring to [14]) that the “German civil security system officially and strongly relies on non-profit relief organisations and their volunteer staff. [...] While most management tasks and everyday emergency services are carried out by professional staff, volunteers remain essential for more exceptional crisis management situations.” [14][15]. Also the country study Austria confirms that “One characteristic of the Austrian Crisis and Disaster Management is the strong involvement of voluntary organizations which enable an easy access to a huge amount of human resources. Due to the fact, that there is no single organisation in Austria, which will be mainly responsible for the response to disasters, related duties will be organized by voluntary organisations” [7]. In contrast, in Bulgaria “the legal provisions for the use of volunteers and volunteer formations are fairly recent. In the short period of about three years in which they are in force, 162 formations were created, and FSCP (Fire Safety and Civil Protection) provides public access to the respective registry” [8].

4.4 Post-disaster assessment and Lessons Learned systems

First evaluations of the country surveys let assume that nearly every organization involved in Crisis Management reports and analyses the measures that have been taken during a disaster as well as during exercises and trainings, in many cases including international/ cross border experiences.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	18 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

Nevertheless, only few additional centralized (national) or inter-organisational Lessons Learned systems including central data bases of respective information and/or a central organization exist like in Ireland [16] or Finland, where investigation reports of all major accidents, regardless their nature, are prepared and include recommendations for improving systems, policies and processes [17][6]. A major problem of these review processes is in many cases the lack of implementation of its findings. As a result, findings of review processes could often rather be seen as lessons identified than lessons learned, which hampers the innovation process.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	19 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

5 Outlook: work in progress

The next (update) phase will focus on pertinent issues regarding the applicability of DRIVER solutions. In a two-way process, information with the teams designing, conducting, and analysing the results of DRIVER experiments will be exchanged. This exchange is planned to be organised along questions, such as:

1. How each proposed and demonstrated solution adds value to the European capacity to manage crises? Potential contributions may range from filling in an identified capability gap, to a more robust crisis management (i.e. increases of effectiveness), to increasing the efficiency of preparedness and response.
2. To what extent the solution could be adapted to framework conditions (i.e. legislation, procedures, organization, existing capabilities, and policy), that differ from the ones in which the experiment took place?
3. What are requirements in the framework conditions (which might differ among countries) that are necessary in order to implement the solution?
4. What additional contextual information is needed to better tailor the solution and design future experiments?

The expectation is that such rigorous and structured exchange, complemented by additional surveys and analysis, will provide a sound foundation for evidence-based recommendations to policy-makers and legislators, as well as to incident commanders, and other decision makers at the operational and tactical levels of crisis management.

From current status, three groups of recommendations are anticipated, addressing respectively the capacity for professional response; strengthening the involvement of societal actors and resilience, and enhancing the capacity to innovate and adapt crisis management policies to evolving risks and societal expectations, with each group covering four thematic issues.

5.1 Professional response

The professional response to crisis management will benefit significantly by enhanced situational awareness, efficient coordination, command and control, streamlined information management, and enhanced logistics.

In terms of awareness, DRIVER solutions will facilitate situational assessment and sense-making, with focus on damage and needs assessment, prediction of crisis evolution and raising alerts, and continuous risk mapping. Further, situation assessment will be complemented by information from airborne sensors, with the requisite mission planning for remotely piloted aerial systems (RPAS) and modelling and optimization in traffic management.

Recommendations on Coordination, Command and Control will focus on multinational/ cross-border, multiagency and, in particular, civil-military coordination. The supporting analysis, including analysis of results of experiments, will cover the issues of resource allocation and tasking, information exchange and interoperability.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	20 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

The focus in the examination of information management is on reporting lines for and exchange of operational situational information, elaboration of a common operational picture (COP), interoperability, crowd sourcing and sending information to the public.

In terms of logistics, the main interest is on modelling logistics processes in crisis management, optimization of transportation means, and cooperation with civil society logistics' stakeholders.

5.2 Resilience

Society can turn into an effective actor in crisis management and disaster response through advanced volunteer management, enhanced societal and community resilience, effective crisis communication, and timely and professional psycho-social support.

Recommendations in regard to volunteer management will focus on volunteer registration databases, ad hoc management of spontaneous volunteers in the field, and crowd tasking.

Societal and community resilience will be addressed by measuring community resilience and raising awareness on local levels, assessment of the resilience of local government and definition of respective action plans, organisation and mobilization of individuals and communities.

The analysis of crisis communication will focus on crisis resilience communication, measuring the impact of messages to the public and the elaboration of key messages to the public.

The focus in providing psycho-social support will be on training, in particular basic training for psychosocial first aid.

5.3 Innovation capacity

The capacity to innovate and adapt to changing circumstances is contingent on the rigour and professionalism of education and training, the capacity to identify and incorporate good practice, and the agility of crisis management organisations.

Recommendations related to education will focus on continuous learning, multinational and multiagency education, as well as the shared understanding of required crisis management competences.

Advances in training will emphasise multi-national and multi-agency training, serious gaming, and training of volunteers, as well as context and dilemma training and the development of educational packages for trainers.

The identification of good practice requires rigorous evaluation and drawing lessons from field experience, exercises, experiments, and demonstrations. Focus is on a lessons learned framework for cooperation, coordination and collaboration across borders, sectors and organisations.

The EU-wide capacity for innovation depends on organizational agility and adaptiveness that include, inter alia, continuous mapping of requirements to available capabilities and maintaining a European crisis management architecture.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	21 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

6 Conclusion

36 intensive surveys of the European Member States, the United Nations and the European Union and additional countries likely to be affected by the DRIVER scenarios have been completed. In a next step (Update of supporting information on CM systems (M25-M35, new task 88.1), more pertinent organisational, legal, and political framework conditions regarding the applicability of DRIVER solutions will be focused upon.

The results of this document:

- serve as non-technological performance conditions and criteria for the DRIVER solutions and will as such support the Design of the Test-bed in DRIVER
- support the scenario design of the Joint Experiments and the Final Demo
- serve as background information for solution providers to enhance the innovation potential of their products and services
- serve together with the results of the DRIVER experimentation activities as a basis for the development of recommendations in WP88 with regard to potential implications for adjustments of structures and processes on UN-level, EU-level and MS-level to policy-makers, legislators, incident commanders and other decision-makers (e.g. in CM organisations of MS)

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	22 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

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Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	23 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

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Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	24 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

Annex 1: List of created studies

Information on Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response of a country or international organization has been gathered and elaborated in 36 individual studies.

The respective author/s of the studies is/are responsible for its content and quality.

List of conducted studies and author organisations:

International organisations / studies

- European Union (EOS)
- United Nations (ECORYS)
- Civil-Military Cooperation in CM (CSDM) – separate structure

EU Member States

- Austria (AIT)
- Belgium (ECORYS)
- Bulgaria (CSDM)
- Croatia (AIT)
- Cyprus (ATOS)
- Czech Republic (AIT)
- Denmark (ECORYS)
- Estonia (CSDM)
- Finland (FhG-INT)
- France (EPLFM)
- Germany (FhG-INT)
- Greece (ATOS)
- Hungary (CSDM)
- Ireland (Q4PR)
- Italy (EOS)
- Latvia (CSDM)
- Lithuania (CSDM)
- Luxembourg (ECORYS)
- Malta (ECORYS)
- Netherlands (ECORYS)
- Poland (CSDM)
- Portugal (ATOS)
- Romania (CSDM)

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	25 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

- Slovakia (AIT)
- Slovenia (CSDM)
- Spain (ATOS)
- Sweden (MSB)
- United Kingdom (CIES)

Selected additional countries, likely to be concerned by the DRIVER scenarios

- Albania (CSDM) (Tsunami – Scenario Final Demo)
- Israel (FhG-INT) (Tsunami – Scenario Final Demo)
- Montenegro (CSDM) (Tsunami– Scenario Final Demo)
- Norway (MSB) (Nordic Ice storm⁴ – Scenario Joint Experiment 2)
- Turkey (ECORYS) (Tsunami – Scenario Final Demo)

⁴ After producing this study, the Ice Storm scenario for Joint Experiment 2 was replaced by a Heat Wave. The study on Norway is kept given that its legislation was already analysed.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	26 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

Annex 2: Template of the studies that has been used as a guideline by the partners/ authors

Note that the guiding notes, which describe the requested content of each chapter, have been deleted in the final studies. Additional guiding notes on formatting etc. have already been excluded here, since they were not relevant for clarifying the content in the different chapters. Nevertheless, they can be found in D81.1 SP8 work Plan Annex B [2].

Country / International Organisation: XXX

Overview

(short summary, up to a page – should give an insight of the characteristic aspects of the country – information might include:)

- National crisis management & disaster response concept
- Key stakeholders: Public governance (government, governors, mayors, parliamentary committees); State sector (police, paramilitary forces, fire brigades, ambulances, doctors), legal (Justice department, lawyers), military, nuclear power plants; Private sector (energy, incl. private nuclear power plants, cyber and telecommunications, drinking water, food, healthcare, finance (banks and others), water management, transportation, chemical industry, defence (ammunitions) industry, others; Volunteer organisations; Specialised NGOs
- Government structure: Authorities and responsibilities at national, regional and local levels
- National organisations responsible for international co-operation (incl. humanitarian aid) and engagement for disaster response and relief
- Financing as a percentage of GDP; ways of financing preparedness and response
- Niche crisis management capabilities ⁵ of interest to the EU and other MSs

Driver definition of a 'Crisis':

⁵ These are capabilities in which a MS or an associated country specialises and it is ready to provide them to other countries in case of a crisis/ disaster, while other countries recognise their quality and are or may be willing to use them. Examples are air assets for fighting massive fires, field hospitals, etc.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	27 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

A crisis within the context of DRIVER is a major disaster (natural or man-made) that requires coordination between or assistance from other MS, i.e. that exceeds the crisis management capacity of one nation or affects more than one MS. This excludes e.g. “financial crisis” or war-like crises.

The information to be gathered during this high-level analysis should therefore primarily be relevant for this type of crisis.

See “Objectives of the survey”: *Definition of “high-level”: national, cross-border, decision-makers-level*

1 Policy

(Working definition: The Crisis Management and related⁶ Policy is designed to effectively coordinate the use of national and community, public and private resources, as well as those provided through international co-operation, to protect life and property before, during and immediately following a major crisis triggered by natural disasters or man-made catastrophes. It is placed into operation whenever an emergency affecting the country, regions or locals cannot be controlled through routine, daily and normal channels and procedures.)

1.1 Risk Assessment

Describe the risk assessment mechanism/procedure and summarise key risks and areas of concern (e.g. earthquakes, nuclear power stations, floods, ...)

1.2 Policy and Governance

Describe the key features of the crisis management framework (e.g. single authority or distributed management; emphasising central or local preparedness and response, state/public or societal, e.g. community, volunteer organizations, individuals)

1.2.1 Strategy scope and focus

Does the strategic approach to crisis management really cover all necessary activities for Prevention (incl. Resilience Actions) – Preparedness – Response (incl. Mitigation) - Recovery? Or the focus is on few of them? (please specify). Are there other national actions that contribute to one of the phases, but are not actually mentioned in the strategic approach to CM?

⁶ E.g. in Germany the responsibility for crises of different types is defined by the “Grundgesetz” (German Constitution).

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	28 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

1.2.2 Monitoring and analytical support to policy making; R&D

Is there any scientific support or specific R&D programme that contributes to risk assessment supporting policy making (e.g. national research programmes, support through academia)? Is there scientific support in other CM policy areas?

1.2.3 Policy for Prevention

(here and for the following three sub-titles: who has the lead responsibilities, who else contributes, please give a brief characterisation of responsibilities, etc., ...)

1.2.4 Policy for Preparedness

1.2.5 Policy for Response

1.2.6 Policy for Relief and Recovery

1.3 Financing

1.3.1 Investing in preparedness

(Status and Expectations: Public – Private; Local – National – Regional – coordination at EU level /Pooling & Sharing -like/ – Centralized EU funding)

Financing disaster preparedness and response (total at all levels, as percentage of GDP)

1.3.2 Investing in consequence management

(Who is expected to cover, or actually covers, the costs of recovery: EU level – National – Local (municipal) – Insurers – the Individual entity)

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Is there a framework or system for assessing the experience of individual emergencies and disasters?

1.4.2 Departmental Lessons Learned systems

Are there Lessons Learned systems in individual organisations as listed above?

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	29 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

1.4.3 Centralised (national) Lessons Learned system

Is there a centralised (national) Lessons Learned system (state/federal level)? If so, which is the responsible agency? How do stakeholders exchange information about problems and successes in previous events? How is the system connected or planned to be connected to efforts at EU-level (i.e. DG ECHO lessons learned system)?

(If available, please provide examples of the impact of lessons learned)

1.4.4 International exchange for Lessons Learned

Does the country participate in international activities to evaluate the experience and learn from it? If so, please provide examples. (bi- / multilateral information exchange)

1.4.5 Regular policy reviews

Is there a process of conducting regular policy reviews and effective incorporation of its findings in the policy process? If so, do the parliament, regional bodies and local communities contribute to the review?

(If available, please provide examples of the impact of lessons learned)

1.5 Resilience

- Does the country/IO implement the concept of resilience?
- If yes, please describe how it fits into the crisis management ecosystem
- Do CM organization, local community and private business apply related standards, e.g. ISO 22301 "Business Continuity Management - Requirements" or any other (formal or industrial) standards? Please specify.

1.6 Information sharing and data protection

1.6.1 Please describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection to enable:

- the sharing of personal data during crises [in 'extreme cases'] or for crisis management purposes, e.g. data on people with particular disabilities
- the sharing of classified information (internally and with third states/ organisations), e.g. data about specific vulnerabilities or about terrorist threats

1.6.2 Does the country/IO have registers/databases of volunteers? If yes, under what circumstances can data be used/ shared? E.g. particular capabilities, level of readiness/ availability, contact information

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	30 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. “crowd sourcing” and “crowd tasking”, "citizen as a sensor")

2 Legislation

2.1 Crisis (emergency, disaster) management concept

(Is there a written conceptual document? If so, please specify. What is its status? What is the scope?)

(Scope, status)

2.2 General crisis (emergency, disaster) management law

Are crisis management arrangements set out in legislation? If yes please describe key statutes (scope, status, etc.)

2.3 Emergency rule

(Does the law envision introduction of emergency rule? Under what conditions? What are the emergency powers? Limitations on individual rights and liberties?)

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

(What is allowed on local level, e.g. are cities allowed to act autonomously?)

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Does crisis management legislation make specific provision for the involvement of NGOs and volunteers? Are there any specific rules or policies on liability or insurance?

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	31 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

2.7 Legal regulations for international engagements of first responders and crisis managers

(UN, EU regulations, other?); rules of engagement, insurance regulations

3 Organisation

3.1 Organisational chart

- National/ IO authority for emergency and disaster management; chain of command and high-level decision-making
- Interdepartmental (inter-ministerial) emergency and disaster management authority
- National permanent emergency and disaster management unit(s)/ formations; first responders
- Planned/ anticipated use of specialised military assets
- Departmental emergency and disaster management arrangements
- Other national civil service organisations
- Provincial (regional) authorities and arrangements for emergency and disaster management (e.g. crisis HQ)
- Local (municipal, town) authorities and arrangements for emergency and disaster management
- Volunteers and volunteer organisations; specialised NGOs
- Private businesses

3.2 Organisational cooperation

- Operational cooperation (e.g., coordinated CM operations planning and response at national level, cross-border operational cooperation, operational cooperation within the EU)
 - How priorities are assigned in the case of simultaneous occurrence of events?
 - How cross-border collaboration is organized? Please identify procedures used by stakeholders for cross-border cooperation (e.g., how is it initiated)
- Cooperation and coordination in CM capability development (coordinated departmental CM capability planning, nationally centralized CM capability planning, multi-nation/ EU-level coordination of capability planning and capability development)

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	32 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

(is about established (or not) procedures of information exchange, coordination, requests, etc., and their actual incorporation by participating organizations)

- Is there a written/ published document(s)?
- What is the scope of the SOP document(s)
- Are SOPs understood and accepted by all parties, and implemented in practice?
- Are the SOPs regularly tested both by activation and by exercise?

4.2 Operations planning

(is about plans - national, agency-level, municipal, etc.)

- Is there a national crisis/ emergency, disaster/ plan?
- Are there departmental crisis/ emergency, disaster/ plans? Please enumerate.
- Are there local crisis/ emergency, disaster/ plans?
- Is the operation planning process standardised? Please identify the standards used (e.g. ISO 22320 "Societal security -- Emergency management -- Requirements for incident response", other formal or industrial standards)

4.3 Logistics support in crises

- Planned/ anticipated use of private logistics providers (e.g. DHL)
- Planned/ anticipated use of military logistics support
- Others?

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

- Who is responsible for crisis communication? Who coordinates crisis communication within and among MSs? How is the inter-organisational coordination of information exchange about crisis communication to the general public organised and managed?
- How long does it take for the general public to become informed about pending hazards?
- Which technical infrastructure is used to achieve situational awareness at local/ national/ European/ international level?

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	33 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

5 Capabilities

5.1 Human resources

- Permanent emergency and disaster management personnel
- Capacity to mobilise personnel
- Involvement of volunteers, volunteer organisations, and specialised NGO personnel
- Involvement of private businesses
- National educational programme(s)

5.2 Materiel (non-financial) resources

- What specific non-financial resources (dedicated equipment etc.) have been allocated to crisis management (central, regional, local preparedness and response)?
- Permanent reserve stocks (fuel, food, medicines, tents, blankets, etc.)
- Planned /anticipated/ involvement of specific military assets (e.g. reconnaissance assets, search and rescue helicopters, fire-fighting planes/helicopters, CBRN, etc.)
- Is provision made for governments to mobilise or commandeer private assets during crises?

5.3 Training

- National, local and departmental exercises
- Centralised specialist training
- Training of volunteers and NGO personnel
- Cross-border and multinational training activities
- Is there a certification system? What standards are used to define specialists' training requirements?
- Are there specialised training programmes for high-level decision makers?
- Training centres

5.4 Procurement

5.4.1 Procurement regulation

Background

Within the European legislation three different procurement directives apply, which are mutually exclusive, meaning that only one of the directives apply to public procurement. Two of the three

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	34 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

directives are topic specific, the first relating to the procurement of energy, water, transport and postal goods and services and the second one relating to the procurement in the defence and security industry. If none of the specific directives apply the general public procurement directive will apply. It is vital to know which of the three directives apply to the procurement of CM solutions and services as the three directives have different procedures and thresholds.

Not all goods and services need to be publicly procured. First of all, contracts with values below the specified thresholds do not have to be procured. The thresholds differ between the directives as well as between goods and services (including trainings). Also some of the articles are not compulsory and Member States can choose not to implement these articles. On the other hand the directives provide minimum rules and Member States can opt to maintain stricter rules as long as the stricter rules are non-discriminatory. Therefore quite some differences might exist between the procurement schemes within Member States and this can influence the adaptation of CM solutions and services in the different MS.

Questions:

- What needs to be procured? E.g. goods or services, including trainings?
- Which EU directive on procurement is applicable on procurement of CM solutions and related? Are all articles of the directive applicable or are some articles not implemented?
- Are additional national regulations applicable and/or are there additional requirements?

Since February 2014 the general procurement directive and the directive for energy, water, transport and postal goods and services have been revised. Most parts of the newly adopted directives need to be implemented in February 2016. One of the new aims of the directives is to facilitate cross-border procurement involving different public institutions. This might be relevant for DRIVER, as Member States are enabled to jointly procure CM solutions. To see if this topic is relevant the following questions could help:

Questions:

- How often is there a need to jointly procure CM solutions or services? And how often does cross-border procurement occur? Are there any considerations for future joint procurement? If yes, in what area and what are potential partner nations?
- Is there a need for additional legislation with regard to cross-border procurement?
- How important is interoperability and do issues arise around the interoperability?

5.4.2 Procurement procedures

Background

The European directives provide the legal boundaries for procurement, but they do not fully regulate the procedures followed. Other projects done show that the actual procedures can differ between Member States. It is important to understand whether the procurement activities are carried out by

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	35 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

a civilian or military organisation. Also insight in their public procurement procedures (which are often defined at a national level) provides a good overview of the different practises.

Crisis management will not be limited to EU-28 countries and neighbouring countries might also be affected. Procurement in these countries is not covered by the EU directives and therefore it is important to have some insights in the procurement practices in these neighbouring countries.

Questions:

- Which organisations are involved in the procurement of CM solutions? And how do they organise their procurement process?
- How is the procurement process in the non-EU countries organised? Are coordinating activities of any kind in place or are they planned?

5.5 Niche capabilities

- Which niche capabilities⁷ of the country/IO are (potentially) of interest to the EU CM and disaster response?

Resources

Legislative acts

Other normative acts

Official documents (white papers, strategies, etc.)

Online resources (e.g. websites of key CM organizations)

⁷ see definition of Niche Capabilities on page 1 “Overview”

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report					Page:	36 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status:	Final

Publications

Expert interviews

Please only mention here the organisation and month of the interview. Only refer to “expert interview” in the text.

Statement from the informed consent form to be sent to the interview partners: *“The results will be published with no possibility to trace the individual views and arguments from the participant. Only the organization name will be mentioned in a list under resources / expert interviews. The limited personal information gathered will be handled under confidentiality and will duly be respected.”*

Please store any personal data separately from this survey, if it is confirmed by the interview partner to be included in the Driver community of interest.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	37 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final

Annex 3: Individual Country / IO studies

The following pages include the detailed study of the countries.

Document name:	D82.11 – CM Organisations Report including Procurement Regulations & D83.11 – Policy and Legislation Report				Page:	38 of 1872
Reference:	D82.11	Dissemination:	PU	Version:	2.0	Status: Final



Driving Innovation in Crisis Management for **E**uropean **R**esilience

EUROPEAN UNION ORGANISATION

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response

Responsible Partner: EOS - Klaudia Tani, Nicola Iarossi

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Crisis management in the European Union (EU) is a multidimensional field, insofar as it concerns different policy fields, both within and outside the EU. Competences of crisis management vary across various EU Institutions in addition to most of the responsibilities remaining with Member States (MS). The Treaty of Lisbon, which entered into force in 2010, foresees several major developments in the discipline, which will have implications for Crisis Management operators in the MS.

Three main bodies are responsible for crisis management within the EU institutional context: DG-ECHO mostly involved with internal EU dimension and the coordination of MS; The European External Action Service (EEAS), involved with the external dimension and the EU Council representing the individual MS. A certain number of specific bodies and emergency's centres have been also developed in order to standardise situational awareness, coordinate the joined MS interventions as well as activate European policies and management of financial support allocated from the European budget via the enactment of different projects in the work programme.

European bodies coordinate with European ongoing intervention on the field implemented by MS first responders; support with European funds Humanitarians Aids activities, Crisis Management response (in a limited extent) and the actuations of European prevention, preparedness policies into MS. The overall approach, including the European Civil Protection Mechanism is being addressed in this study of EU institutions in Crisis Management (CM). For this reason, no peculiar field-assets are owned and operated directly by the European Bodies but Emergency Centres, like the ERCC (Emergency Response Coordination Centre in DG ECHO) and Crisis Rooms (in EEAS and The EU Council) with relevant IT Tools for supporting the European Union mission in the Crisis Management and Civil Protection area.

Table of Contents

EUROPEAN UNION ORGANISATION Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response.....	39
Overview.....	40
Table of Contents	41
List of Figures	44
List of Tables.....	44
List of Abbreviations.....	45
1 Policy	47
1.1 Risk Assessment	47
1.2 Policy and Governance	51
1.2.1 Strategy scope and focus.....	52
1.2.2 Monitoring and analytical support to policy making (R&D).....	53
1.2.3 Policy for Prevention	55
1.2.4 Policy for Preparedness	56
1.2.5 Policy for Response	57
1.2.6 Policy for Relief and Recovery	60
1.3 Financing	61
1.3.1 Investing in preparedness	61
1.3.2 Investing in consequence management.....	62
1.4 Policy review, Evaluation & Organisational Learning	62
1.4.1 Post-Disaster Assessment.....	62
1.4.2 Departmental Lessons Learned systems	62
1.4.3 Centralised (national) Lessons Learned system	63
1.4.4 International exchange for Lessons Learned.....	63
1.4.5 Regular policy reviews	63
1.5 Resilience	64
1.6 Information sharing and data protection	65
1.6.1 Describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection.....	65
1.6.2 Does the country/IO have registers/databases of volunteers?	66
1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. "crowd sourcing" and "crowd tasking", "citizen as a sensor")	66

2	Legislation	68
2.1	Crisis (emergency, disaster) management concept.....	68
2.2	General crisis (emergency, disaster) management law.....	69
2.3	Emergency rule	70
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	70
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	72
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	72
2.7	Legal regulations for international engagements of first responders and crisis managers ..	72
3	Organisation.....	74
3.1	Organisational chart.....	74
3.1.1	The European Commission – Main Structures for Aftermath Crisis Management.....	74
3.1.2	The European External Action Service – Main Structures for Aftermath CM	77
3.1.3	The Council of the European Union – Main Structures for Aftermath CM	80
3.2	Organisational cooperation	81
3.2.1	CSDP Coordination with Civil Disaster Response and MSs.....	82
3.2.2	Coordination and cooperation with UN/OCHA	82
3.2.3	Coordination and cooperation with NATO/EADRCC	83
4	Procedures	85
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	85
4.2	Operations planning.....	85
4.3	Logistics support in crises	85
4.4	Crisis communication to general public; Alert system; Public Information and Warnings ...	86
5	Capabilities	87
5.1	Human resources	87
5.2	Materiel (non-financial) resource	88
5.3	Training	92
5.4	Procurement	96
5.4.1	Procurement regulation	96
5.4.2	Procurement procedures	100
5.5	Niche capabilities	100
	Resources	101
	Legislative acts	101
	Other normative acts	101

Official documents (white papers, strategies, etc.)	101
Online resources (e.g. websites of key CM organizations)	102
Publications	103
Expert interviews	103

List of Figures

<i>Figure 1: EFFIS application</i>	48
<i>Figure 2: GDACS news and alerts</i>	48
<i>Figure 3: UNITAR Mbera Refugee Camp, Bassikounou, South-Eastern Mauritania</i>	49
<i>Figure 4: GDACS situational map</i>	50
<i>Figure 5: GVCA Global Vulnerability and Crisis Assessment, September 2014</i>	55
<i>Figure 6: Organisational Chart of DG-ECHO, Oct. 2014</i>	75
<i>Figure 7: European Humanitarian Aid and Civil Protection Concept</i>	76
<i>Figure 8: CM Modules</i>	89
<i>Figure 9: Training Courses</i>	93

List of Tables

<i>Table 1: Response Resources by types.</i>	52
<i>Table 2: Response Resources by types</i>	90
<i>Table 3: DG-ECHO Calls for Tenders, 2008-2015 ^[1]</i>	96
<i>Table 4: DG-ECHO Service Contracts, 2013</i>	99

List of Abbreviations

CCA	Crisis Coordination Arrangement
CCAEx	Crisis Coordination Arrangement Exercise
CFSP	Common Foreign and Security Policy
CIVCOM	Committee for Civilian Aspects of Crisis Management
CM	Crisis Management
CMPD	Crisis Management and Planning Directorate
COHAFA	Humanitarian Work and Food Aid
COSI	Standing Committee on Operational Cooperation on Internal Security
CPCC	Civilian Planning and Conduct Capability
CSDP	Common Security and Defence Policy
DEVE	Development
DG	Directorate General
ECHO	Humanitarian Aid and Civil Protection
EDRIS	European Disaster Response Information System
EEAS	European External Action Services
EFAS	European Flood Awareness System
EFFIS	European Forest Fire System
EU	European Union
ERCC	Emergency Response and Coordination Centre
FCA	Forgotten Crisis Assessment
FYROM	Former Yugoslav Republic of Macedonia
GDACS	Global Disaster Alerts and Coordination Systems
GNI	Gross National Income
GVCA	Global Vulnerability and Crisis Assessment
HIP	Humanitarian Implementation Plans
HR/VP	High representative/Vice President

IES	Institute of Environmental Studies
IfS	Instrument for Stability
IT	Information Technology
JRC	Joint Research Centre
MIC	Monitoring and Information Centre
MS	Member State
NGO	Non-Governmental Organisation
OH	Operational Headquarters
PSC	Political and Security Committee
R&D	Research and Development
SF	Structural Funds
SITCEN	Intelligence Analysis Centre
TFEU	Treaty of Lisbon
UN	United Nations

1 Policy

1.1 Risk Assessment

The European Commission developed an alerting system which feeds information to the EU Civil Protection Mechanism participating states real-time in order to improve their analytical capacity in terms of disaster monitoring and early warning mechanisms⁸.

In addition, a European Flood Awareness system (EFAS) was established with the aim to collect information on floods, and inform the the National/Regional Hydrological Services as well as the Emergency Response and Coordination Centre (ERCC) up to ten days before a severe incident. The EFAS was established by the Institute for Environment and Sustainability (IES) and is currently operated by four separate consortia:

- **EFAS Computational** centre;
- **EFAS Dissemination** centre;
- **EFAS Hydrological data collection** centre and
- **EFAS Meteorological data collection** centre⁹.

The European Forest Fire Information System (EFFIS) was also established by the IES, but is currently operated under the Joint Research Center (JRC) of the European Commission (EC). The picture below shows the functions of the application, with availability to search by country, narrow the hot spots as well as fire severity and fire perimeters. Thus, a possible fire erupting in South of France would be more easily prevented, as their civil protection agency would be aware of the high risk of fire eruption in the next few hours.

⁸ DG ECHO, *Monitoring Tools*, http://ec.europa.eu/echo/what/civil-protection/monitoring-tools_en

⁹ European Flood Awareness system, <https://www.efas.eu/>

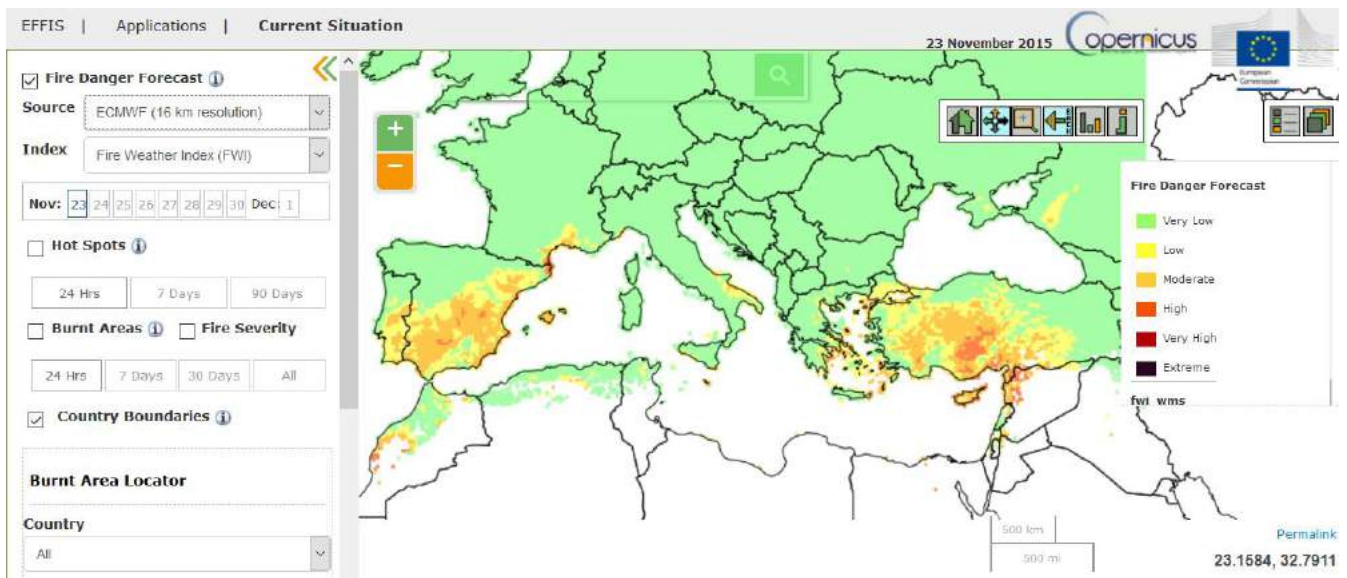


Figure 1: EFFIS application

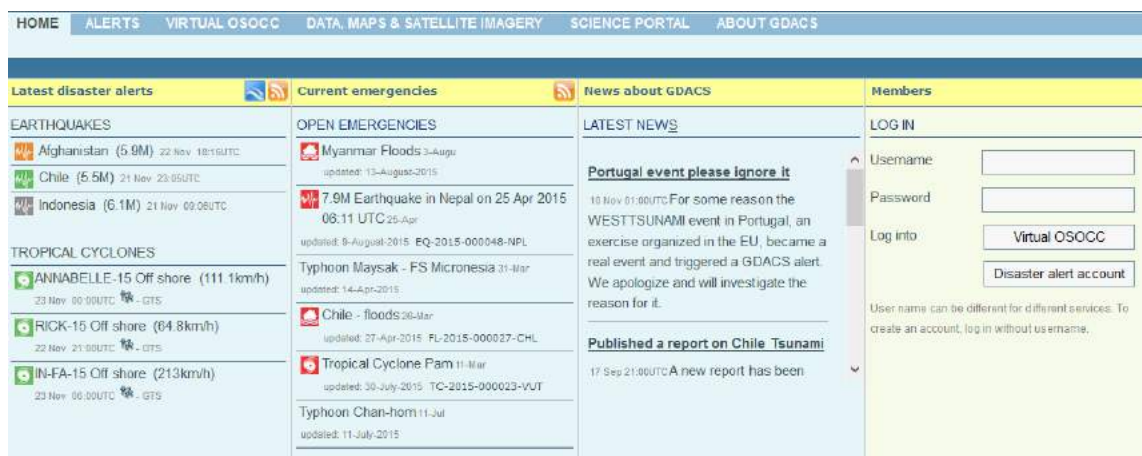


Figure 2: GDACS news and alerts

In addition, the Global Disaster Alerts and Coordination System (GDACS) was developed by the Joint Research Centre and used by the EU and UN. It is a fully automated real time alerting system which gathers data about all types of natural events. As also shown below, the latest disasters alerts are portrayed in a wall per disaster and there are also latest news and reports posted regularly.

“GDACS is a collaboration platform for organisations providing information on humanitarian disasters. From a technical point of view, GDACS links information of all participating organisations using a variety of systems to have a harmonized list of data sources. In 2011, the GDACS platform was completely revised to collect, store and distribute resources explicitly by events. The system matches information from all organisations (by translating unique identifiers), and make these resources available for GDACS users and developers in the form of GDACS Platform Services”¹⁰.

¹⁰ GDACS, Event-based data and information, <http://portal.gdacs.org/data>

[illegible]

This satellite imagery, can assist to any type of intervention during a crisis and ensure that CM professionals are informed of what to expect within this camp.

¹¹ UNITAR, http://www.unitar.org/unosat/node/44/2322?utm_source=unosat-unitar&utm_medium=rss&utm_campaign=maps

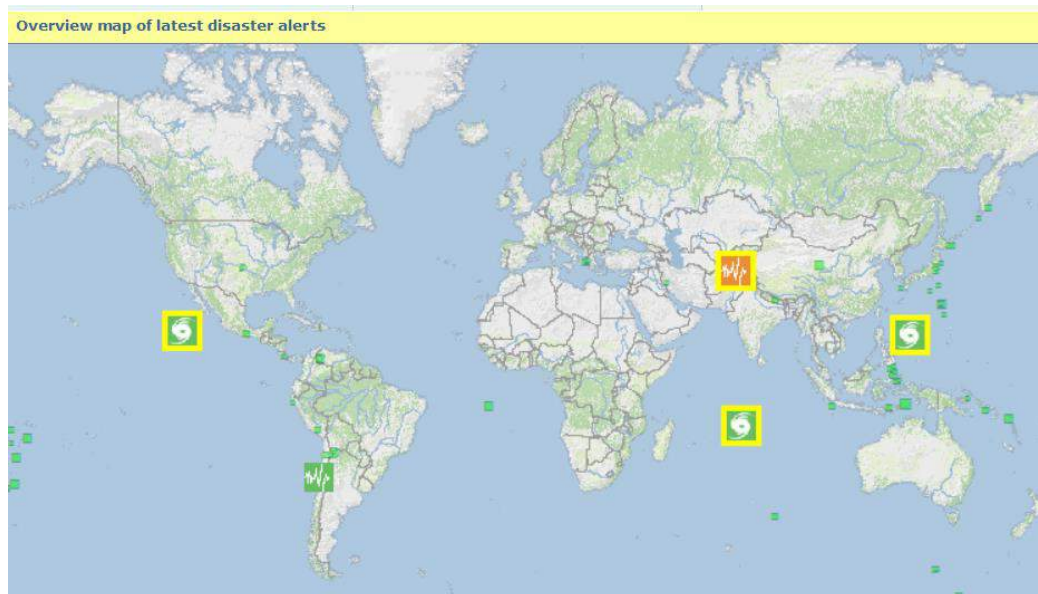


Figure 4: GDACS situational map

Further monitoring mechanisms include the European Mediterranean Seismological Centre (EMSC) which allows for earthquake detection in the Mediterranean area to be considerably quicker and accurate, by adding also sensors in Tunisia.

The European Commission also cooperates with the Intergovernmental Oceanographic Commission (IOC-UNESCO) on the establishment of a tsunami warning system for the North Atlantic and Mediterranean region similar to the one implemented in the Indian Ocean region.

It further

“promotes international cooperation and coordinates programmes in marine research, services, observation systems, hazard mitigation, and capacity development in order to understand and effectively manage the resources of the ocean and coastal areas. By applying this knowledge, the Commission aims to improve the governance, management, institutional capacity, and decision-making processes of its Member States with respect to marine resources and climate variability and to foster sustainable development of the marine environment, in particular in developing countries”¹².

IOC observes and monitors the oceans with the Global Ocean Observing System (GOOS) and it “aims to develop a unified network providing information and data exchange on the physical, chemical, and

¹² Intergovernmental Oceanographic Commission (IOC), About us, <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/about-us/>, accessed December 23rd

biological aspects of the ocean”¹³. Relying to this information, other stakeholders may act on the ocean.

In addition, the Indian Ocean Tsunami Warning System (IOTWS) is coordinated by a “network of country systems in which each country has the responsibility of identifying the hazard, assessing the risk and issuing the warning to its population”¹⁴.

Finally, early warning and monitoring systems are developed and financed by the Civil Protection Financial Instrument. Systems focus on the EU MS' territory and mechanisms within as well as mechanisms shared with third countries through EEAS.

1.2 Policy and Governance

The EU has a broad set of instruments and structures to respond to crises and disaster internal and external to the EU. These instruments and structures are found within the EC as well as the EEAS. Today the EU's MSs also cooperate frequently in order to prevent and respond to natural or manmade disasters both inside and outside the EU. In addition to bilateral and multilateral arrangements, the basis for the EU-level cooperation of the MSs is placed within the European Commission and in order to increase EU's ability regarding aftermath over the last decade various structures and features have been introduced.

The main instruments/ structures for EU aftermath CM are under the EU Commission:

- Civil Protection (Commission, DG ECHO);
- Humanitarian Aid (Commission, DG ECHO);
- Consular Protection (Commission);
- EU Solidarity Fund (Commission).

Under the EEAS:

- Aftermath CM actions under the Instrument of Stability (EEAS);
- CSDP (EEAS), where tasks as humanitarian assistance and rescue support can be included;
- the new function of “Managing Director for crisis response and operational coordination (EEAS). This function is supposed to promote coordination within the EU, and more specifically between the Commission and the EEAS in relation to disasters outside the EU.

Under the Council of the European Union:

- The Crisis Coordination Arrangements (CCA). The purpose of CCA is to promote coordination at a high political level in the EU in relation to crises having an impact on several MSs or being of

¹³ Intergovernmental Oceanographic Commission (IOC), About us, <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/about-us/>, accessed December 23rd

¹⁴ S.S.L.Hettiarachchi et al. Risk Assessment and Mitigation within a Tsunami Forecasting and Early Warning Framework: Case Study - Port City of Galle, http://www.ioc-tsunami.org/index.php?option=com_oa&task=viewDocumentRecord&docID=16002

‘political significance’ for the EU. For an overview of the EU’s instruments and structures for aftermath CM, see the figure below.^[3]

1.2.1 Strategy scope and focus

The EU’s role is limited to the coordination and promotion of cooperation between national, regional, and local disaster response capacities (art. 6 of the Treaty on the Functioning of the European Union), especially for preparedness and response phases as defined in the Treaty of Lisbon (art. 196 TFEU). This process was introduced only a decade ago and the EU does not, thus far, have any highly sophisticated in-house competence in the various domains pertaining to crisis management.

Coordination concerns, as already indicated (see Table 1), civil protection assistance inside and outside the EU, humanitarian assistance as well as military and civil operations outside the EU. Regarding the latter, such action falls under the so-called Common Security and Defence Policy (CSDP), which is part of EU’s external tools, with specific decision-making procedures and actors involved.

Table 1: Response Resources by types.

Other reported types of response resources	
First aid / medical care related resources	First aid and emergency care (including psychological and psychosocial support)
	Emergency mobile hospital
Logistics / transport related response resources	Transport, logistics and storage
Maritime response related resources	Marine Pollution team
	Marine SAR team
	Technical Diving Team
	Diving rescue team
	EMSA capacities (see description below)
Search and rescue related resources	Canine search and rescue team

	Detection and handling of explosive material
Sampling and detection related resources	Decontamination in case of a biological and or chemical attack
	Sample collection teams with equipment (Chemical)
	Decontamination in case of a radiological or nuclear attack
	Detection teams with equipment (Radioactivity)
	Ecological laboratory with mobile unit
Fire fighting related resources	Fleet of medium to high capacity aircraft used in 2007 by the Member States includes 24 for France, 16 for Italy, 18 for Portugal, 27 for Spain and 21 for Greece
Assistance / support related resources	Expert pool
	Coordination/assessment experts
	Water purification
	Container kitchens / Emergency food supplies
	Emergency shelter

The Union has been able, as we will show, to play an active role in coordinating and supporting crisis management operations, as well as in establishing platforms for information sharing and early warning. In the words of one Commission official, the EU strives in its disaster response, to be first in and last out. In this sense, the EU and its Member States seek to act comprehensively when disaster strikes – from immediate protection and humanitarian relief, to longer term development and risk mitigation and preparedness. Indeed, the EU’s ability to work following a “comprehensive approach”, as described above, and cover coordination of all aspects of a crisis, include prevention, with wide range of tools at its disposal, has bettered disaster response worldwide.

1.2.2 Monitoring and analytical support to policy making (R&D)

The European Commission's DG ECHO is committed to develop every year a strategic plan in order to co-ordinate and to programme its activities efficiently and in an appropriate manner adopting a holistic approach based on MS needs. To ensure maximum transparency, ECHO's annual strategies are available to the public.

In order to be consistent in the allocation of resources to different countries according to their respective needs, regardless of pressure, and to guarantee the credibility and transparency of Community humanitarian aid - the European Commission has developed a set of rigorous need assessment tools.

DG ECHO, in fact, has developed a two-phase framework for assessing and analysing needs in specific countries and crises. The framework provides an evidence base for prioritisation of needs, funding allocation, and development of humanitarian implementation plans (HIPs).

The first phase is based on the Global Vulnerability and Crisis Assessment (GVCA) tools. The GVCA is a tool based on national indicators and composite data that allow for a comparative analysis of countries to identify the level of vulnerability/ crisis. The first component identifies the most vulnerable countries, where humanitarian needs are likely to be greater in the event of a disaster, using a vulnerability index. The second component identifies countries that are in a humanitarian crisis situation corresponding to the ECHO intervention criteria, by means of a crisis index. Taken together, the two indices define the priorities for intervention.

The indicators could vary from health risks to numbers of refugees and IDPs. This data produces a final table which looks like the following

2014 - v.2 (September) - Global Vulnerability and Crisis Assessment				
Indicator list		Sub-indicator level		
GVCA Final Index		1		
ISO3	Country	GVCA Vulnerability Index	GVCA Crisis Index	GVCA Final Index
ATG	Antigua and Barbuda	1	0	0.5
KNA	Saint Kitts and Nevis	1	0	0.625
ARG	Argentina	1	0	0.875
DMA	Dominica	1	0	0.875
GRD	Grenada	1	0	0.875
BLR	Belarus	1	0	0.938
OMN	Oman	1	0	0.938
TON	Tonga	1	0	0.938
LCA	Saint Lucia	1	0	1
SYC	Seychelles	1	0	1
TKM	Turkmenistan	1	0	1
URY	Uruguay	1	0	1
MDV	Maldives	1	0	1.062
MUS	Mauritius	1	0	1.062
KAZ	Kazakhstan	1	0	1.125

GEO	Georgia	2	3	10.75
PSE	Palestine	2	3	10.75
PHL	Philippines	2	3	10.75
SYR	Syrian Arab Republic	2	3	10.812
IRQ	Iraq	2	3	10.875
COL	Colombia	2	3	11.062
MMR	Myanmar, Union of	3	3	11.125
PAK	Pakistan	3	3	11.125
YEM	Yemen	3	3	11.125
KEN	Kenya	3	3	11.188
UGA	Uganda	3	3	11.25
AFG	Afghanistan	3	3	11.312
NGA	Nigeria	3	3	11.375
MLI	Mali	3	3	11.438
SDN	Sudan	3	3	11.5
TCD	Chad	3	3	11.625
COD	Congo, Democratic Republic of the	3	3	11.688
SOM	Somalia	3	3	11.688
SSD	South Sudan	3	3	11.75
CAF	Central African Republic	3	3	11.812

Figure 5: GVCA Global Vulnerability and Crisis Assessment, September 2014

To note here that this “application is a prototype tool for DG ECHO and the EU Member States. The purpose is to provide access, in an interactive way, to the composite indicators, as well as their source data, that are used in ECHO's humanitarian needs strategy”¹⁵.

As compendium to the GVCA another tool is used: the Forgotten Crisis Assessment (FCA). The FCA is a methodology which identifies serious humanitarian crisis situations where the affected populations are not receiving enough international aid or even none at all. The second phase of the framework focuses on the sub-crisis context and response analysis, carried out jointly by ECHO experts in both the field and in the Brussels headquarters. The main difference between GVCA and FCA, is that FCA takes into account more historical components that could eventually prevent an escalation of a probable crisis.

1.2.3 Policy for Prevention

There are both formal and informal principles that guide EU-cooperation in the aftermath of CM. The principles on subsidiarity, no duplications, collective responsibility and solidarity pave the way for the aftermath of CM actions in the EU.

The third principle is referred to as the principle of collective responsibility that implies that the MSs collectively are responsible for the prevention of and the preparedness for a crisis in the EU.

¹⁵ CVCA/FCA, <http://echo-global-vulnerability-and-crisis.jrc.ec.europa.eu/PublicVisualization.aspx>

The MSs have the responsibility to carry out preventive and preparatory measures at the national level. When measures are taken at the national level considerations must be taken of the fact that if national crisis prevention and preparedness are not undertaken, this may cause damage to the EU as a whole since crises today tend to be transnational.^[3]

The adoption of these principles do not allow for identification of who is responsible and what Unit needs to be informed when. In policy when the political mandate is given to the relevant Commissioner and the service structure (Director General, Director of the specific Directorate, Heads of Unit) of the relevant EC's Departments it needs to be clear and straight forward in order for CM professional to be able to identify quickly the decision making route.

1.2.4 Policy for Preparedness

In terms of preparedness, the EC has adopted a Strategy Paper for the period 2014-2020 and Multi-Annual Indicative Programme 2014-2017 for the Instrument

“contributing to Stability and Peace identifying five priorities for actions in the areas of conflict prevention, peace-building and crisis preparedness as provided for in Article 4 of the Regulation (EU) No 230/2014: a) Promoting early warning and conflict-sensitive risk analysis in policy making and implementation; b) Facilitating and building capacity in confidence-building, mediation, dialogue and reconciliation, with particular regard to emerging inter-community tensions; c) Strengthening capacities for participation and deployment in civilian stabilization missions; d) Improving post conflict recovery, as well as post disaster recovery with imminent threats to the political and security situation; e) Assistance to curb use of natural resources to finance conflicts and to support compliance by stakeholders with initiatives, such as the Kimberley Process Certification Scheme, especially as regards implementation of efficient domestic controls on the production of, and trade in, natural resources”¹⁶.

The aim of this instrument also includes, as part “a” states early warning and conflict-sensitive risk analysis in policy making and implementation, which is key for promoting preparedness. The EU thus is trying to close the gap of warning-response.

The EU also has preparedness strategies for health risks developed since 2011. “A generic emergency management plan comprises a range of activities to protect communities, property and the environment, and is usually based on a ‘comprehensive’ approach, an ‘all hazards’ approach, a ‘multi-sectoral and inter-sectoral’ (or ‘all agencies’ or ‘integrated’) approach that encompasses all elements that are relevant in ensuring that Member States have a ‘prepared

¹⁶ European Commission, COMMISSION IMPLEMENTING DECISION of 27.5.2015 on the Annual Action Programme 2015 for the Instrument contributing to Stability and Peace - Conflict prevention, peace-building and crisis preparedness component to be financed from the general budget of the European Union, http://ec.europa.eu/dgs/fpi/documents/20150601_2015_aap_icsp_article_4_en.pdf

community”¹⁷. Giving the opportunity to EU MS to support their national plans and rely on their regional and European partners.

Finally, any preparedness approach deriving from the EU, has a 7 step planning:

1. Information Management;
2. Communication;
3. Scientific/evidence based advise;
4. Health crisis management structures;
5. Intersectoral collaboration;
6. Health sector preparedness;
7. Management of plans¹⁸.

1.2.5 Policy for Response

It is still improbable, due to legal and political constraints, that the EU will be able to create its own civilian protection corps as suggested in 2005 by the Barnier Report¹⁹. The EU is instead planning, as indicated in the Commission’s Communication on crisis response, to create a “European Emergency Response Capacity”²⁰, which would consist of a pool of pre-identified national assets voluntarily be made available, for immediate deployment in EU-led disaster response operations. These assets could be deployed, as advocated by the European Parliament under the designation of an EU Civil Protection Force to increase the visibility of EU action. The following principles stated in the Communication should be recalled since they will guide the work on the development of the EU disaster response capacity in the near future:

- Geographic coverage: internal and external to the EU

The EU should be able to respond more effectively to disasters both inside the EU and outside the EU.

A fully coherent approach for disasters outside the EU will need to bring together the different instruments that could possibly be deployed depending on the nature of the crisis. The objective should be to identify and deploy the most appropriate resources to respond to any given disaster.

- Nature of disaster: all types

The EU disaster response capacity should address all types of disasters (other than armed conflicts) that overwhelm national response capacities and result in a need for EU assistance.

- Central role of the UN for humanitarian assistance

¹⁷ European Commission, Strategy for Generic Preparedness Planning Technical guidance on generic preparedness planning for public health emergencies
http://ec.europa.eu/health/preparedness_response/docs/gpp_technical_guidance_document_april2011_en.pdf

¹⁸ European Commission, Generic Preparedness planning,
http://ec.europa.eu/health/preparedness_response/generic_preparedness/planning/index_en.htm

¹⁹ Michel Barniers, For a European civil protection force: Europe aid,
http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/031006barnier_/031006barnier_en.pdf

²⁰ DG ECHO, ECHO Factsheet,
http://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/emergency_response_capacity_en.pdf

EU assistance should act in accordance with internationally agreed humanitarian principles when responding to humanitarian needs caused by disasters outside the EU. Improved EU coordination will help strengthening the central coordinating role of the UN.

- Balance response, prevention, preparedness

An approach that balances response with disaster prevention and preparedness will be the cornerstone of the EU strategy on disaster management.

- Cost-effectiveness

Improving cost effectiveness will lead to more efficient ways of delivering assistance, such as pooling of assets to reduce costs and avoid duplication of efforts.

The setting-up of the EU Emergency Response Capacity responding to the above guiding principles requires progress to be made in the near future, especially in terms of planning, assets, deployment and coordination.

The adoption of these principles doesn't allow to identify exact "responsibilities" in the policy actuation, out of the political mandate given to the relevant Commissioner and the service structure (Director General, Director of the specific Directorate, Heads of Unit) of the relevant EU Commissions Departments called also Directorates-General (DG-ECHO and the External Action Service).

There are often great expectations that the Lisbon Treaty will solve EU's challenges regarding coordination between the Union's different institutions and CM structures. But the fact is that responsibility within the EU for the aftermath of an incident is divided between the EEAS and the EC.

Consequently, new forms of cooperation need to be developed. Regarding EU-assistance the modalities for coordination between the institutions will be set in a decision adopted by the Council on a joint proposal by the Commission and HR/VP. The COSI (Standing Committee on Operational Cooperation on Internal Security) sets within the Council for ensuring that operational cooperation on internal security is promoted and strengthened within the Union and the Political and Security Committee (the PSC) shall assist the Council in this respect. The importance of further EU-coordination between different EU-instruments is highlighted through the Solidarity Clause (article 222) which reads as follows:

"The Union and its MSs shall act jointly in a spirit of solidarity if a MS is the object of a terrorist attack or a victim of a natural or man-made disaster. The Union shall mobilise all instruments at its disposal, including the military instruments of the MSs, to:

- *prevent the terrorist threat in the territory of the MSs;*
- *protect the democratic institutions and the civilian population from any terrorist attack;*
- *assist a MS in its territory, at the request of its political authorities in the event of a terrorist attack;*

- *assist a MS in its territory, at the request of its political authorities, in the event of a natural or a man-made disaster*²¹.

Furthermore, it is stipulated that if a MS is the object of a terrorist attack or victim of a natural or a man-made disaster, the other MSs shall offer assistance at the request of the political authorities of the stricken MS. The MSs shall too, to that end, coordinate their measures within the European Council.

Furthermore, the Lisbon Treaty has introduced a new function, the High Representative of the Union for Foreign Affairs and Security Policy and Vice president for the Commission (HR/VP). The role of the HR/VP is three-fold: to represent the Council in foreign affairs and security policy, to be the Commissioner for external relations as well as to be one of the Vice-Presidents of the Commission.

A European External Action Service (EEAS) is comprised of officials from relevant departments of the General Secretariat of the Council and of the Commission as well as staff seconded from national diplomatic services of the MSs that in turn will work in close cooperation with the diplomatic services of the MSs. The EEAS will assist the HR/VP.

In 2010 a new function for crisis response and operational coordination was established within the EEAS. The purpose of this function is to provide for coordination between the EEAS and the Commission instruments, especially the Monitoring and Information Centre (MIC) recently replaced and updated by the new Emergency Response Coordination Centre (ERCC), when a disaster is ongoing.

The Managing Director (further on referred to as “the Director”) has got the task of promoting coordination within the EU, and more specifically between the Commission and the EEAS in relation to disasters outside the EU. The Director is a member of the Corporate Board of the EEAS, thus, working under the direct authority of the HR/VP. The Director shall support HR/VP in ensuring coherence and coordination of the EU’s external actions, notably as regards crisis response and management. For example the Director shall support HR/VP to develop appropriate coordination mechanisms with the EC, not only DG ECHO, but also assist EU MSs in crisis response outside of Europe and regarding the liaison with UN agencies as well as international and civil society organisations. Furthermore, the Director is responsible for ensuring effective and coherent cooperation within the EEAS, more specifically between the CM and Planning Directorate (CMPD), the Civilian Planning and Conduct Capability (CPCC), the EUMS and the EU Intelligence Analysis Centre (EU SITCEN). In relations to disasters outside the EU, the Director shall “[...] define strategic lines to be followed in bilateral and multilateral contacts and coordinate of the relevant headquarter services and EU-delegations.” Finally HR/VP may delegate specific tasks and missions to the Director related to crisis response.

²¹ European Union, Consolidated Version of the Treaty on the Functioning of the European Union, Solidarity Clause, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN>

The EU-delegations have got an enhanced mandate to coordinate the EU's actions in third countries. The EU-delegations will take over the political coordination between the MSs and obtain a strengthened role in relation to the EU's civilian and military operations. The purpose is to achieve more coordinated and coherent EU action.

The Lisbon Treaty also gives the EC power to initiate legislation in the area of consular protection, for example directives to enhance cooperation and coordination. The European Council in turn may also as a consequence of the Lisbon Treaty adopt acts by qualified majority (as in the area of Civil Protection). Moreover, the Lisbon Treaty underlines an increased need for a "European dimension to consular protection"²².

Since 2007 the Civil Protection Mechanism can be utilised to support consular assistance to the EU citizens in major emergencies in third countries. Like the declaration of a state of emergency of Bosnia and Herzegovina, after major flooding in its western part in 2014. Moreover, during crises for example in Libya and Egypt in 2011 and in Haiti in 2010, information sharing and coordination of assistance among EU consular authorities was made possible through an EU secure website "Consular On-Line" provided by the SITCEN. In March 2011, the EC presented a Communication on the state of play and the way forward to further develop the cooperation.^[3]

1.2.6 Policy for Relief and Recovery

One of the main EU activities impacting the relief policy is Humanitarian Aids.

Based on international humanitarian principles and as set out in the European Consensus on humanitarian aid²³, the EU provides needs-based humanitarian assistance with particular attention to the most vulnerable people or communities²⁴. Aid is channelled impartially to the affected populations, regardless of their race, ethnic group, religion, gender, age, nationality or political affiliation.

The EU provides remedy to all major crises zones around the world including Syria, South Sudan, and the Central African Republic, as well as countries facing post-conflict instability, such as Côte d'Ivoire. The EU also plays a crucial role in assisting and raising awareness of "forgotten crises" – often protracted crises which escaped the media and international community's attention.

EU humanitarian aid covers areas such as: food and nutrition, shelter, healthcare, water and sanitation among others. Aid, funded by the EU, is carried out in partnerships with international organisations and humanitarian NGOs.

²² Communication From the Commission to the European Parliament and the Council Consular protection for EU citizens in third countries: State of play and way forward, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0149&from=en>

²³ European Council, European Consensus on humanitarian aid, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:025:0001:0012:EN:PDF>

²⁴ European Commission, Humanitarian Aid and Civil Protection, Helping victims of disasters and conflicts, and protecting those at risk, http://europa.eu/pol/pdf/flipbook/en/humanitarian-aid_en.pdf

In order to support the recovery of stricken areas within the EU territory, the EU set up a specific fund (the Solidarity Fund). This specific fund has helped MS and third countries in distress, to recover after a major disaster. For example 16.2 mil EUR were given to Greece and Bulgaria this July, after major flooding. Recovery operations are financed through this specific fund²⁵.

The Solidarity Fund was established in 2002 after a Council decision, and was amended in 2014. It is a complementary instrument to the efforts put by the state and it is based on the subsidiary principle, where the assistance is critically needed to avoid major repercussions to society. This instrument has to be deployed immediately and in a swift manner, without surpassing the responsibility of the State.

*"It may be desirable for the beneficiary State, in conformity with its specific constitutional, institutional, legal or financial context, to associate the regional or local authorities with the conclusion and the application of the implementation arrangements, the beneficiary State remaining in all cases responsible for the implementation of the assistance and for the management and control of the operations supported by Community financing"*²⁶.

1.3 Financing

1.3.1 Investing in preparedness

In the field of civil protection, the EU plays an "enabling role" to support, coordinate or supplement the actions of Member States in the prevention of, preparedness for, and response to disasters. The primary responsibility for the protection of people as well as the environment and property, including cultural heritage, remains with MSs.

Consequently, it is MSs who bear the financial costs of most civil protection actions, leaving the EU civil protection budget relatively small, compared to that for humanitarian aid. Whereas, the EU civil protection budget can only offer limited incentives, Structural Funds (SF) can support with more substantial funding. "The budget for the implementation of the **EU Civil Protection Mechanism** for 2014-2020 is €368.4 million of which €223.7 million shall be used for prevention, preparedness and response actions inside the EU and €144.6 million for actions outside the EU. These amounts are complemented by contributions from non-EU countries that participate in the EU Civil Protection Mechanism"²⁷.

²⁵ European Commission, Commission allocates €16.2 million from the EU Solidarity Fund to Greece and Bulgaria in the wake of natural disasters, http://ec.europa.eu/regional_policy/en/newsroom/news/2015/07/commission-allocates-eur16-2-million-from-the-eu-solidarity-fund-to-greece-and-bulgaria-in-the-wake-of-natural-disasters

²⁶ European Commission, Regulation (EC) No 2012/2002 of 11 November 2002 establishing the European Union Solidarity Fund, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02002R2012-20140628&from=EN>

²⁷ European Commission, Financing Civil Protection, http://ec.europa.eu/echo/funding-evaluations/financing-civil-protection_en

1.3.2 Investing in consequence management

The EU Solidarity Fund (EUSF) was established in November 2002. The purpose was to enhance the EU's ability to respond to major disasters, to show and articulate solidarity with disaster struck regions within the EU and to support the recovery of stricken areas. The total amount of EUSF is set to a total of 1 billion Euros per year²⁸. Previously there had been no funding or programmes available in the area of Civil Protection at the EU level, since funding was exclusively under the competence of MSs. In order to be granted from the EUSF there are three categories which need to be fulfilled: (1) The total costs of the damages amount to over three billion Euros (in 2002 prices) or more than 0,6 % of a country's Gross National Income (GNI). (2) A neighbouring country or accession country is seriously affected by the same crisis, but does not suffer damages that meet the criterion set up for the first category and regions are seriously affected by disasters. (3) The total annual assistance to regions can amount to a maximum of 7,5 % of the total budget for the EUSF. ^[3]

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

For Civil Protection, specific requirements for interim and ex-post evaluation are provided in the Decision on a Union Civil Protection Mechanism (Art. 34).^[1] This regulation, COM (2011) 9344, has been recently adopted in 2013; thus, the process to acquire and manage Lesson Learned is relatively new. This evaluation process is comprised of the achievements indicated from lesson learned for all the operation conducted by using the European CM mechanism.

1.4.2 Departmental Lessons Learned systems

Within the above mentioned program of evaluation and lesson learned, the Emergency Response Coordination Centre (ERCC) adopted its own process for evaluating the lesson learned in each operation where the Centre is involved²⁹. For example one of the lessons learned mentioned in a study funded by the EC, is that "by pooling resources and capacities, the Mechanism provided greater predictability and reliability of assistance as compared to bilateral cooperation mechanisms"³⁰.

²⁸ Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Union Solidarity Fund, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52005PC0108&from=EN>

²⁹ Wilkinson C. and Zimmerman S., Evaluation of Civil Protection Mechanism - Case study report - Forest Fires in Europe, http://ec.europa.eu/echo/files/evaluation/2015/CPM_case_study_forest_fires_en.pdf

³⁰ Wilkinson C. and Zimmerman S., Evaluation of Civil Protection Mechanism - Case study report - Forest Fires in Europe, http://ec.europa.eu/echo/files/evaluation/2015/CPM_case_study_forest_fires_en.pdf

1.4.3 Centralised (national) Lessons Learned system

In the EU, the centralised system for lesson learned is the one managed by DG-ECHO as mentioned above.

1.4.4 International exchange for Lessons Learned

The lesson learned procedure is organised in a way that, at the end of each evaluation activity for the specific operation, a meeting with all the stakeholders involved is mandatory. In case of participation or cooperation with international organisations, the relevant operators/representatives are involved and become part of the lesson learned assessment process. As an example of such meeting, we could consider the one held after the operation in the recent Philippine Tsunami in 2013. DG ECHO deployed technical assistance after the tsunami and has provided an assessment in 2013³¹.

“Rapid field needs assessments have been conducted by ECHO staff from the RSO in Bangkok, which was then complemented by information from the EU CP team members that were placed in key coordination positions where information was continuously coming in from different parts of the affected area. In addition, ECHO received various reports from implementing partners including information exchanged with the ASEAN Emergency Response Assessment Team (ERAT). This team was supported by a member of the ASEAN Partnership Group (APG), which receives funding from ECHO. ECHO also received satellite Maps from the Copernicus Emergency Mapping System, which were widely shared”³².

The immediate assessment showed that shelter, food, drinking water and medical care were lacking in the field and should be provided to the State.

1.4.5 Regular policy reviews

Correct implementation of EU-funded operations is ensured by several layers of audits and monitoring, at internal level and by external actors.

Controls performed by the Commission

The main aspects of the control strategy developed by the Commission include supervision and monitoring procedures and ex-ante/ex-post controls.

- “Strict selection and quality control mechanisms for partners under the Framework Partnership Agreement that the Commission signs with NGOs and international

³¹ DG ECHO, ECHO assessment report 2013, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/deve/dv/echo_assessment_report_/echo_assessment_report_en.pdf

³² DG ECHO, ECHO assessment report 2013, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/deve/dv/echo_assessment_report_/echo_assessment_report_en.pdf

organisations as well as defining the requirements for financial credentials and expertise of partners;

- Appraisal of project proposals and on the spot project monitoring through a network of the Commission field experts (technical assistants) worldwide;
- Regular field visits to projects by geographical desks, auditors and the Commission management;
- Obligation for partners to produce reports after the end of each operation to justify their expenses. A thorough analysis of these reports and checks on eligible expenditure are carried out by operational and financial desk officers at the Commission;
- Regular evaluations are undertaken, focusing on major country operations, partners and thematic issues. The results of these are posted on the Commission's website;
- EU- funded humanitarian aid activities implemented by external parties (partners and contractors) are subject to financial and systems audit;
- All Commission services have an internal audit capacity. This provides an independent and objective opinion on the quality of the internal control systems and assists the Director General and management in controlling risks and monitoring compliance"³³.

The monitoring mechanisms listed above should not be seen in isolation. Each contributes to providing reasonable assurance on the legality of transactions and their general compliance with relevant rules.

1.5 Resilience

As a follow up to the Communication "The EU approach to resilience: learning from food security crises"³⁴, Council Conclusions were adopted in May 2013 and the Resilience Action Plan issued in June 2013. The Action Plan provides the framework for continuing and scaling up EU efforts for resilience at different levels (from policy and advocacy to tools and methods) and with concrete country/region strategies and specific cases. In 2014, the Commission will contribute to implementing the resilience agenda and will, in particular, integrate resilience as a driver for quality and aid effectiveness of its humanitarian response and development assistance. Closer co-operation within Commission services and with the EEAS will be pursued. Resilience will be systematically included as an element in the Humanitarian Implementation Plans (HIP). Better coordination between development and humanitarian objectives and interventions will be pursued, based on a common analysis of risks and vulnerabilities. In October 2013, a joint instruction letter on the implementation of the Commission's approach to resilience was sent to Ambassadors of the EU Member States, heads of EU Delegations and heads of ECHO field offices. The letter sets out the expectation that resilience will "be streamlined and integrated as a priority in our programming

³³ Delivery, Coordination and Control on the use of EU funds, *Monitoring of use of funds*, pg. 25

³⁴ Communication from the Commission to the European Parliament and the Council The EU Approach to Resilience: Learning From Food Security Crises,
http://ec.europa.eu/echo/files/policies/resilience/com_2012_586_resilience_en.pdf

(humanitarian/development, EU/Member States) in order to allow the EU's external assistance to make a difference to the most vulnerable”³⁵.

The EU approach to resilience acknowledges national governments' responsibility to build resilience. Building resilience is a long-term process that needs to be context-appropriate and embedded in national policies and planning for development. In order to contribute effectively to this agenda, the Commission will engage in a more structured way with governments at local and regional level as well as central level. A central objective of resilience is to address underlying, and linked, causes of people's vulnerability. This requires that multi-faceted actions be supported by humanitarian and development assistance partners over the short, medium and long term.

The resilience approach must bring sustainable benefits to the most vulnerable populations and households, taking into account the diversity of needs of women, children, men and the elderly, who may suffer from multiple factors of vulnerability including those coming from the climate change. Action is required at various levels and dimensions. In line with its experience and added value, the Commission will in particular contribute to action at community level.

In this context, the Commission will increasingly be involved in joint planning processes with the Member States that have the potential to play a key role in supporting the resilience agenda. The Commission will work in close partnership with other donors, multilateral agencies and Civil Society Organisations in support of National and Regional resilience strategies. The Intra-ACP resilience building programmes as well as the AGIR initiative in the Sahel and the SHARE initiative in the Horn of Africa provide a framework for co-ordination. Elsewhere, the Commission will seek to develop strategic and operational partnerships, at all levels, to optimise different expertise and added value behind resilience objectives.

1.6 Information sharing and data protection

1.6.1 Describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection

Various mechanisms are in place to ensure coordination and exchange of information crisis response and humanitarian aid activities in general, including:

- Member States and the Commission meet regularly in the Council Working Group on Humanitarian Aid and Food Aid (COHAFA). Exchange of information on overall strategies and on responses to specific crisis situations features regularly in the agendas of COHAFA;
- Crisis reports are shared with Member States. They contribute to the development of shared assessment and understanding on the situation on the ground and thus contribute to the overall coordination of the EU response;

³⁵ European Commission SWD(2013) 503 Final, Commission Staff Working Document Annual Strategy for Humanitarian Aid in 2014: General Guidelines on Operational Priorities, http://ec.europa.eu/echo/files/policies/strategy/strategy_2014_en.pdf

- Exchanges with partners both at headquarters and at the field take place regularly;
- The European Disaster Response Information System (EDRIS) collects data on Commission and Member States' humanitarian aid activities;
- At international level, the Commission continues to participate in well-established fora such as the Good Humanitarian Donorship and the ICRC Donor Support Groups. It will chair the OCHA Donor Support Group in 2014;
- Regular exchanges of views on the EU's response to crisis take place in the European Parliament (DEVE Committee);
- DG ECHO organises ad hoc crisis coordination meetings of the EU services (including ARGUS meetings) and participates in broader inter-service meetings aimed at exchanging information (such as e.g. Crisis Platform meetings organised by the EEAS).

The EU is supposed to not derogate from its own laws, thus EU laws concerning data privacy protection compliancy is fully adopted by the EU institutions, also in the scope of crisis management activities.

1.6.2 Does the country/IO have registers/databases of volunteers?

Regulation No 375/2014 of the European Parliament and the Council on establishing the European Voluntary Humanitarian Aid Corps ('EU Aid Volunteers initiative') dated 03/04/2014 established a database for the registered volunteer organisations as at the article 13:

Database of EU Aid Volunteers:

1. *Candidate volunteers who have successfully passed the assessment referred to in Article 12(5) shall be considered to be EU Aid Volunteers and shall be eligible for deployment. They shall be included as such in the database of EU Aid Volunteers.*
2. *The Commission shall establish, maintain and update the database of EU Aid Volunteers, including as regards the availability and eligibility of EU Aid Volunteers for deployment, and shall regulate access to and the use of it. The processing of personal data collected in or for this database shall be carried out, where relevant, in accordance with Directive 95/46/EC and Regulation (EC) No 45/2001³⁶.*

1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. "crowd sourcing" and "crowd tasking", "citizen as a sensor")

³⁶ REGULATION (EU) No 375/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Voluntary Humanitarian Aid Corps ('EU Aid Volunteers initiative'), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0375&from=EN>

No specific plan results for using data gathered from social media, although the EU is co-funding different R&D project in this specific area and a specific software module gathering information from the social media is already implemented in one of the situation awareness system in the Emergency Response Coordination Centre (ERCC).

2 Legislation

2.1 Crisis (emergency, disaster) management concept

There are both formal and informal principles that guide EU-cooperation in aftermath CM. The principles on subsidiarity, no duplications, collective responsibility and solidarity pave the way for aftermath CM actions in the EU³⁷.

The principle of subsidiarity is central in the aftermath of CM. A crisis or a disaster shall be managed at the lowest possible level, such as the national or the local level. Preventing and responding to disasters is first of all a national responsibility. When national capabilities are overwhelmed, EU MSs can, however, request assistance through the Civil Protection Mechanism (see below) or through other bilateral or regional agreements. The importance of the principle of subsidiarity in the EU in general is, inter alia, underlined through a new provision in the Treaty of Lisbon which paves the way for a greater possibility for the national parliaments exerting influence on the EU policy process to see to that subsidiarity is being considered.

Closely interlinked to the principle of subsidiarity is the second principle to not duplicate capacities and structures that already exist. In other words, capacities that already are present at the national level and at the local level shall not be established at the EU level as well.

The third principle is referred to as the principle of collective responsibility that implies that MSs collectively are responsible for the prevention of and the preparedness for a crisis in the EU. MSs have the responsibility to carry out preventive and preparatory measures at the national level. When measures are taken at the national level considerations must be taken of the fact that if national crisis prevention and preparedness are not undertaken, this may cause damage to the EU as a whole since crises today tend to be transnational.

The last principle is the principle of solidarity that can be described as the very essence of the cooperation within the EU. The principle of solidarity indicates that MSs shall support each other in the event of a major crisis or emergency. The Civil Protection Mechanism and the Crisis Coordination Arrangement (CCA) are two concrete examples of this principle. The importance of solidarity provided in crisis situations amongst EU MS has increased over the years, not least as a consequence of the many terrorist attacks and the natural disasters that have struck Europe during the last decade. This has, inter alia, paved the way for the introduction of a solidarity clause in the Lisbon Treaty.

³⁷ European Commission, Annual Report 2012 On Subsidiarity And Proportionality, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0566&from=EN>

The ‘General Provisions on the Union’s External Actions’ in the Lisbon Treaty includes two new articles, Article 2 and Article 6, which stipulate that the Union shall define and pursue common policies and actions and work for a high degree of cooperation in all fields of international relations in order to:

- preserve peace, prevent conflicts and strengthen international security;
- assist populations, countries and regions confronting man-made or natural disasters³⁸.

Hence, there is an apparent ambition expressed in the Lisbon Treaty to develop a more coherent EU response to disasters outside the Union³⁹.

2.2 General crisis (emergency, disaster) management law

Cooperation within Civil Protection could be traced to the end of the 1970s in relation to the managing of marine pollution. During the 21st century, the scope of the European cooperation in this area has deepened and broadened and today it covers cooperation to prevent, prepare and respond to disasters. At present, the cooperation in the area is based on two legal acts:

- the Council Decision establishing a Community Civil Protection Mechanism from 2001 (a revised version was adopted in autumn 2007)⁴⁰;
- the Council Decision establishing a Civil Protection Financial Instrument adopted in 2007⁴¹;
- The Emergency Response Coordination Centre (ERCC) was set up in May 2013;
- The Council Decision No 1313/2013/EU of The European Parliament and of The Council of 17 December 2013 on Amending the Union Civil Protection Mechanism.

The Lisbon Treaty provides the area of Civil Protection with a specific article – Article 196 ‘Civil Protection’, and formally establishes Civil Protection as an area of ‘shared competence’ between the Union and the MSs⁴². Shared competence means that the EU is given the competence to carry out actions to support, coordinate and complement actions undertaken by the MSs. However, the measures carried out by the EU shall not replace those of the MSs, nor shall EU legislation comprise the harmonization of national legislation⁴³. Article 196 on Civil Protection stipulates that supportive, coordinating or complementary measures carried out by the Union shall be made with a view to increasing the efficiency of the systems for crisis prevention, preparedness and response to natural and manmade disasters. These measures shall aim to:

³⁸ European Union, Treaty of Lisbon Article 22, <http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-european-union-and-comments/title-5-general-provisions-on-the-unions-external-action-and-specific-provisions/chapter-1-general-provisions-on-the-unions-external-action/100-article-22.html>

³⁹ European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12007L%2FTXT>

⁴⁰ European Parliament and European Commission, Decision No 1313/2013/EU Of The European Parliament And Of The Council of 17 December 2013 on a Union Civil Protection Mechanism, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1313&from=EN>

⁴¹ COUNCIL DECISION establishing a Civil Protection Financial Instrument, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007D0162&from=EN>

⁴² European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12007L%2FTXT>

⁴³ European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12007L%2FTXT>

- Support, coordinate and complement those measures taken at a national, regional or local level concerning the prevention of risks, the preparedness of the MSs' actors within the area of Civil Protection as well as the response to natural and other disasters within the EU,
- Enable rapid and efficient operational cooperation between Civil Protection capacities of the MSs and to
- Ensure coordination between international actions as regards Civil Protection.

Prior to the Lisbon Treaty, each MS had the opportunity to block a decision. The establishment of measures necessary to achieve the objectives referred to above will from now on be taken in accordance with the ordinary legislative procedure, which involves a strengthened legislative role for the European Parliament and a qualified majority as the ordinary voting procedure in the Council.

2.3 Emergency rule

No specific emergency rule introduction is envisaged in the EU legislation. Even the most recently adopted regulation in this scope doesn't introduce variation on the obligation and responsibilities comprised at MS level or by the other EU regulation in place. For example, the "Decision for the introduction of a New Union Mechanism of Civil Protection" is stating at Chapter 1 / Article 1 the following points:

"5. The Mechanism shall not affect Member States' responsibility to protect people, the environment and property on their territory against disasters and endowing their emergency management systems with sufficient capabilities to enable them to cope adequately with disasters of a magnitude and nature that can reasonably be expected and prepared for.

*6. The Mechanism shall not affect obligations under existing relevant legislation of the Union or the European Atomic Energy Community or under existing international agreements"*⁴⁴.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

A set of specific legal arrangements has been established by the European Commission, The Council and the European parliament in dedicated areas.

The Treaty of Lisbon underpins the commitment of the EU to provide assistance, relief, and protection to victims of natural or man-made disasters around the world (art. 214), and to support and coordinate the civil protection systems of its Member States (art. 196). It further mandates the European institutions to define the necessary measures for such actions to be carried out.

⁴⁴ European Council, 2007/779/EC, Euratom: Council Decision of 8 November 2007 establishing a Community Civil Protection Mechanism, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32007D0779%2801%29>

The following is an overview of the legal framework which has been established to-date:

- Regulation No 375/2014 of the European Parliament and the Council on establishing the European Voluntary Humanitarian Aid Corps ('EU Aid Volunteers initiative') - 03/04/2014
- Decision No 1313/2013/EU of the European Parliament and of the Council on a Union Civil Protection Mechanism - 17/12/2013
- Regulation (EC) No 1257/96 concerning humanitarian aid - 20/06/1996
- Commission Decision 2010/481/EU, Euratom amending Decision 2004/277/EC, Euratom as regards rules for the implementation of Council Decision 2007/779/EC, Euratom establishing a Community civil protection mechanism - 29/07/2010
- Commission Decision 2008/73/EC, Euratom amending Decision 2004/277/EC, Euratom as regards rules for the implementation of the Mechanism - 20/12/2007
- Commission Decision 2007/606/EC, Euratom laying down rules for the implementation of the provisions on transport - 08/08/2007
- Commission Decision 2004/277/EC laying down rules for the implementation of Council Decision 2001/792/EC - 29/12/2003
- Council conclusions on the development of the external dimension of the European Programme for Critical Infrastructure Protection - 09/06/2011
- Council conclusions on Integrated Flood Management within the European Union - 12/05/2011
- Council conclusions on Further Developing Risk Assessment for Disaster Management within the European Union - 11/04/2011
- Council Conclusions on Host Nation Support - 02/12/2010
- Conclusions on Innovative Solutions for Financing Disaster Prevention - 08/11/2010
- Council conclusion on Psychosocial support - 21/05/2010
- Council Conclusions on a Community framework on disaster prevention within the EU - 30/11/2009
- Council Conclusions calling for civil protection capabilities to be enhanced by a European mutual assistance system building on the civil protection modular approach (16474/08) - 28/11/2008
- Council Conclusions on Reinforcing the Union's Disaster Response Capacity – towards an integrated approach to managing disasters - 16/06/2008
- EP resolution on Community approach on the prevention of natural and man-made disasters - 21/09/2010
- European Parliament resolution on stepping up the Union's disaster response capacity - 19/06/2008
- Commission Staff Working Document on EU Host Nation Support Guidelines - 01/06/2012
- Commission Staff Working Paper on Risk Assessment and Mapping Guidelines for Disaster Management - 21/12/2010
- COM(2010)600 Communication Towards a stronger European disaster response: the role of civil protection and humanitarian assistance - 26/10/2010
- COM(2009)82 Communication on a Community approach on the prevention of natural and man-made disasters - 23/02/2009
- COM(2008)130 Communication on Reinforcing the Union's Disaster Response Capacity - 05/03/2008

- Commission Staff Working Document SEC(2007)1721 Towards Better Protecting Citizens against Disaster Risks: Strengthening Early Warning Systems in Europe - 14/12/2007^[1]

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

NOT DIRECTLY APPLICABLE FOR THE EU ORGANISATION.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Regulation No 375/2014 of the European Parliament and the Council on establishing the European Voluntary Humanitarian Aid Corps ('EU Aid Volunteers initiative') dated 03/04/2014 *"establishes a European Voluntary Humanitarian Aid Corps ('the EU Aid Volunteers initiative') as a framework for joint contributions from European volunteers to support and complement humanitarian aid in third countries. This Regulation lays down the rules and procedures for the operation of the EU Aid Volunteers initiative and rules for the provision of financial assistance and applies to:*

1. *selection, training and deployment of EU Aid Volunteers to support and complement humanitarian aid in third countries;*
2. *actions that support, promote and prepare the deployment of EU Aid Volunteers to support and complement humanitarian aid in third countries;*
3. *actions inside and outside the Union aimed at building the hosting organisations' capacity for humanitarian aid in third countries.*"⁴⁵

2.7 Legal regulations for international engagements of first responders and crisis managers

Depending on specific emergencies, a particular "Term of reference" is adopted within the EU bodies operating in such situation. Rules of engagement for the CM operators or first responders involved into international operations follow the UN/OCHA guidelines in such respect.

"The Cluster Approach operates at two levels. At the global level, the aim is to strengthen system-wide preparedness and technical capacity to respond to humanitarian emergencies by designating global Cluster Leads and ensuring that there is predictable leadership and accountability in all the main sectors or areas of activity. At the country level, the aim is to ensure a more coherent and effective response by mobilizing groups of agencies, organizations and NGOs to respond in a strategic manner across all key sectors or areas of activity, each

⁴⁵ European Commission, EU Aid Volunteers initiative: Technical Assistance for sending organisations Capacity Building for humanitarian aid of hosting organisations, Call for proposals, http://eur-lex.europa.eu/legal-content/en/TXT/PDF/?uri=OJ:JOC_2015_017_R_0005

sector having a clearly designated lead, as agreed by the Humanitarian Coordinator and the Humanitarian Country Team”⁴⁶.

⁴⁶ UN OCHA, Generic Terms of Reference for Sector/Cluster Leads at the Country Level https://docs.unocha.org/sites/dms/ROWCA/Coordination/ToR_GenericTerms_of_Reference_Sector_EN.pdf

3 Organisation

3.1 Organisational chart

Although different EU Commission Directorates are involved in crisis management, the European Union Organisation affecting Civil Protection and Crisis Management Coordination and Support is structured in three “Institution”:

1. The European Commission - Directorate General for Humanitarian Aids and Civil Protection;
2. The European External Action Service and
3. The European Council.

3.1.1 The European Commission – Main Structures for Aftermath Crisis Management

Civil Protection and Humanitarian Aid (DG ECHO)

The main instruments for EU crisis response are found within DG ECHO and consist of the Civil Protection Community Mechanism and the Emergency Response Coordination Centre (ERCC) as well as the EU instruments for humanitarian aid.

The Mechanism constitutes the basis of cooperation within the area of Civil Protection. It is a structure through which participating states voluntarily may pool their Civil Protection capacities to countries inside or outside the EU that have requested help to all types of major emergencies including natural and man-made disasters such as acts of terrorism, technological, radiological and environmental accidents.

DG ECHO finances humanitarian aid outside the EU to e.g. the UN, the International Committee of the Red Cross (ICRC) or other non-governmental organisation (NGOs) that implement the humanitarian aid. DG ECHO has got considerable financial means, around 640 million Euro/ per year but limited operational capacity. Besides the head office in Brussels, ECHO has got field offices around the world. ^[3] The DG-ECHO organisation chart at October 2014 is represented in the following figure:



Figure 6: Organisational Chart of DG-ECHO, Oct. 2014

The Mechanism involves the participation of all EU MSs, Norway, Iceland, Liechtenstein and Croatia. At the EU level, the ERCC serves as the focal point for the participating states' national contact points. It is accessible 24/7. ERCC serves as a forum for the access and the sharing of information between the participating states, it provides early alerts and information on interventions carried out through the Mechanism as well as facilitates coordination of assistance by matching offers of assistance put forward by participating states to the needs of countries requesting help. The ERCC's state-of-the-art crisis situation centre provides monitoring and analytical capacity, and has close links with EU research programmes and research organisations to foster and utilize innovation in crisis response and management. The ERCC and the national contact points communicate through the reliable web-based alert and notification application Common Emergency and Information System (CECIS), mentioned above, as well as the ERCC Portal for wider dissemination of information. Moreover, there is a Civil Protection financial instrument that was adopted in 2007, which enables financial support for activities regarding prevention, preparedness and response to a crisis. Up to 50 % of the total transportation costs, with exceptions for materiel, may also be financed through the instrument. The instrument covers a period from 2007 to 2013 and amounts approximately 190 million EUR. From mainly having been focusing on the handling of a disaster, cooperation in the area of Civil Protection now also includes prevention.

The Emergency Response Coordination Centre (ERCC), operating within the European Commission's Humanitarian Aid and Civil Protection department (ECHO), was set up to support a coordinated and quicker response to disasters both inside and outside Europe using resources from 31 countries participating in the Union Civil Protection Mechanism. The ERCC replaces and upgrades the functions of the previous Monitoring and Information Centre (MIC). With a capacity to deal with several simultaneous emergencies in different time zones, around-the-clock, the ERCC is a coordination hub facilitating a coherent European response during emergencies helping to cut unnecessary and expensive duplication of efforts. It collects and analyses real-time information on disasters, monitors hazards, prepares plans for the deployment of experts, teams and equipment, and works with Member States to map available assets and coordinate the EU's disaster response efforts by matching offers of assistance to the needs of the disaster-stricken country. Better planning and the preparation of a set of typical disaster scenarios will further enhance the ERCC's capacity for rapid response. "The ERCC also supports a wide range of prevention and preparedness activities, from awareness-raising to field exercises simulating emergency response"⁴⁷.

The following Figure, instead, compares the main aspects of instruments, EU Civil Protection and humanitarian aid.


 The European Commission Humanitarian Aid and Civil Protection – two complementary tools		
	Humanitarian Aid	Civil Protection (MIC)
What?	Funding from EC budget (€930 million in 2009). Active donor: programming and policy development in the field of humanitarian aid.	Voluntary contributions of assistance in kind from Member States (experts, specialised teams, equipment, other material assistance). Budget of Civil Protection Financial Instrument = EUR 189 million over seven years.
To whom?	Implementing partners (UN specialised agencies / Red Cross/Crescent movement/ NGOs / international organisations).	Government of affected country
Geographical scope?	The most vulnerable population(s) in third countries, mainly in developing countries.	Inside and outside the European Union.
Type of disaster?	Natural and man-made disasters (wars, conflicts, forgotten crises etc.).	Natural and man-made disasters (complex emergencies rather the exception).
Timescale?	Immediate aftermath of crisis and beyond (presence of humanitarian needs).	Acute stage only (normally max. 2-3 weeks).

Figure 7: European Humanitarian Aid and Civil Protection Concept

⁴⁷ DG ECHO, ERCC, http://ec.europa.eu/echo/what/civil-protection/emergency-response-coordination-centre-ercc_en

Others involved Directorates:

In aftermath CM, the **Secretariat-General of the Commission** has got an important role to ensure coordination between different Directorate General (DGs) and services. The EU CM Unit was established in 2008 in order to improve the Commission's internal CM. The Commission's security office is the operative point of contact for ARGUS staffed 24/7 (24 hours 7 days a week, see below).

Early warning and rapid alert systems for different crises that could have severe consequences for many MSs are found within the Commission. These different systems have developed sector-wise and their establishment is often a result of specific events. There are for example systems for radiological emergencies (ECURIE) within DG Energy and Transport, chemical and biological threats (RAS BICHAT, RAS CHEM), contagious diseases in humans (EWRS), threats to animal health (ADNS), threats to plant health (EUROPHYT), threats in food and feed (RASFF), threats to consumer health and safety (RAPEX) within DG Health and Consumers, threats against critical infrastructures (CIWIN) within DG Home Affairs and Civil Protection incidents (CECIS) and global disaster monitoring (GDACS) within DG ECHO.

For cross-sectorial crises the Commission's Secretariat-General holds a coordinating role by operating a Web-based network (ARGUS). The network enables rapid information exchange between a range of Commissions departments and ensuring high-level political coordination. All DGs have got a designated point of contact for ARGUS, but all DGs are not allowed to feed information into the system. Besides promoting the internal coordination of the Commission, ARGUS also consists of a Web portal where MSs' permanent representations to the EU and the Council Secretariat may take part of non-classified information in case of a crisis.

The Directorate General for Regional Policy (DG-REGIO) is instead in charge of the EU Solidarity Fund management, while the Directorate General for Justice (DG-JUSTICE) is dealing with the Consular protection in case of crisis and the related EU citizens evacuation mechanism.

3.1.2 The European External Action Service – Main Structures for Aftermath CM

The newly formed European External Action Service (EEAS) is the main policy-making organ responsible for political and security-related aspects of crisis management, the so-called Common Foreign and Security Policy (CFSP) and the Common Security and Defence Policy (CSDP), under the responsibility of the High Representative for Foreign Policy.^[2] The High Representative of the Union for Foreign Affairs and Security Policy and Vice president of the European Commission (HR/VP) has the overall responsibility for the policy development regarding the EU's external actions.^[3]

Within the EEAS, a distinction is made between crisis response and CM. The first includes swift and short-term measures, which are the responsibility of the Managing Director for Crisis Response and Operational Coordination (see paragraph 1.2.5).^[3] The EEAS was, originally, not intended to have a disaster response role beyond its political, security and defence remit. However, after the Haiti

earthquake, it was decided that the EEAS should play a wider role in coordinating activities which concern the whole of the Union's external action. The post of "managing director for crisis response and operational coordination" was therefore created. The director's role is to support the High Representative in coordinating and ensuring coherence in the EU's external relations when it comes to crisis management and response; assist in developing mechanisms within the EU institutions, and with third parties for better communication and coordination. However, this position is recent and the clarification of the mandate is under development. The second includes long-term measures including for example stabilization and capability development, which is the responsibility of one of the HR/VP's deputy secretary-general.

The HR/VP office relays to different structures and related Instruments for actuating Civil Protection policies and actions. The structures connected with the Instruments of Stability and the CSDP are exposed hereafter:

DG External Action (DG RELEX) and the Instrument for Stability

The HR/VP also is the Commissioner for External Relations. DG RELEX has established a crisis room that provides support as well as monitoring and information services during a crisis or a regular operation. The crisis room has contacts with the EU-delegations on the ground in an affected country in issues concerning aftermath CM or political crises. Work is on-going on merging SITCEN and DG RELEX crisis rooms. The purpose of the Instrument for Stability (IfS) is to prevent or take care of situations of instability in third countries, for example as a consequence of disasters or in high or low intensity conflicts. Focus is on conflict prevention, CM and peace building. IfS is used within the scope of the development tools within the European Commission, however, when the latter are not able to intervene in time.

Civilian aspects of CSDP and its Support to aftermath CM and recovery

The Union is developing also a Common Security and Defence Policy (CSDP), covering all questions relating to EU's security, including the progressive framing of a common defence, should the Council so decide. The CSDP was given a range of CM functions (known also as the "Petersberg tasks") under the Amsterdam Treaty. They include inter alia humanitarian and rescue operations, peace-keeping, and combat operations in CM, including peace-making. CSDP has two fields of action:

- a civilian crisis management structure, which deploys Police, Justice, and Public Administration experts to conflict areas to substitute locally scarce structures, or help reorganise local security sectors;
- a military, peacemaking and peacekeeping component⁴⁸.

In this area, major changes were introduced with the entry into force of the Lisbon Treaty. First, the military and civilian CSDP components which were previously managed by the Council structures (DGE) have both been transferred into the EEAS and most importantly, integrated into the same

⁴⁸ Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2011 Annual Report on the Instrument for Stability, http://eur-lex.europa.eu/resource.html?uri=cellar:2ec28dd4-ecfd-492e-8e83-24c2f9da87b3.0001.02/DOC_1&format=PDF

department with the objective to better coordinate their work. Civilian-military cooperation has already started developing at the planning stage, at capability level as well as in the field. This is not, as we will see, the case yet between military and civil protection tools deployed under Commission's coordination.

Since the first civilian deployment in 2003, civilian CSDP missions have extended their scope (police, monitoring, justice, security sector reform, border assistance), nature (non-executive e.g. having a mandate only to advise and executive e.g. a mandate to take the enforce decisions), geographic location and size. Civilian experts (seconded and contracted) are deployed in civilian CSDP missions⁴⁹. As a matter of fact, civilian CM has become the most frequently used tool under CSDP.

The CSDP civilian CM structure is composed by different bodies:

- the Civilian Planning and Conduct Capability (CPCC)
- the Committee for Civilian Aspects of CM (CIVCOM)
- the CM and Planning Directorate (CMPD)

The Civilian Planning and Conduct Capability (CPCC) is responsible for an autonomous operational conduct of civilian CSDP missions. Under the political control and strategic direction of the PSC (Political and Security Committee, assisting the Council decision) and the overall authority of the High Representative, the CPCC ensures the effective planning and conduct of civilian CSDP CM missions, as well as the proper implementation of all mission-related tasks.

On civilian issues, the PSC is provided with recommendations and advice by CIVCOM (Committee for Civilian Aspects of CM), a working group at expert level. Main tasks: to assist PSC and other Council bodies by acquiring a comprehensive view of the means available to the EU and MSs to respond to a crisis; to improve EU's CM capability e.g. by developing and implementing lessons learned, common standards and best practices, helping to ensure a higher degree of coherence in EU strategies, helping to improve co-ordination of resources and exchange of related information in the EU.

In addition to the CPCC and CIVOM, the newly established CM and Planning Directorate (CMPD) operates as an integrated structure for strategic planning of CSDP civilian and military missions, and also for supporting the various aspects of CSDP development.

Military aspects of CSDP and its support to disaster response

Whereas the civilian CM provides the EU a tool for supporting post-conflict societies in rebuilding basic functions and institutions of a state, the CSDP military CM capabilities are often described as the military arm of the EU. The key EU bodies relevant and specific to the CSDP military CM are:

- the European Union Military Staff;
- the European Union Military Committee and
- the Joint Situation Centre.⁵⁰

⁴⁹ European Union, CSDP, Civilian CSDP Missions: lessons and best practices, <https://www.consilium.europa.eu/uedocs/cmsUpload/Fact%20Sheet%20-%20Civilian%20CSDP%20missions%20-%202009%20report%20on%20lessons%20and%20best%20practices.pdf>

⁵⁰ European Union, Military Staff of the European Union (EUMS), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:r00006>

The European Union Military Staff provides in-house military expertise for the High Representative of the Union for Foreign Affairs and Security Policy (HR) and performs early warning, strategic planning, and situation assessment. The EUMS is the only permanent integrated military structure of the European Union. Established on 11 June 2001, the EU Military Staff receives tasking from the EU Military Committee (which represents the Chiefs of Defence of all the MSs). It exhibits a permanent strategic planning capability, i.e. the “analysis of the implications of political objectives, the desired end-state, restraints, constraints, and capabilities needed for a particular operation”. Furthermore the EUMS runs the EU Operational Centre, a skeleton Operational Headquarter (OH) for CSDP missions that can be upgraded to an active OH, if needed and requested by MS.

The European Union Military Committee or (EUMC) is composed of the Chiefs of Defence (CHOD) of the MSs, who are regularly represented by their permanent Military Representatives (MilReps). It has a permanent chairman, selected by the CHOD of the MSs and appointed by the Council. The EUMC is the military counterpart to the CIVCOM.

The Joint Situation Centre (SITCEN) is implemented within the Council General Secretariat and is also run by the EUMS. It provides 24/7 intelligence, analysis and early warning and serves as communications hub for the HR and EUSR⁵¹.

3.1.3 The Council of the European Union – Main Structures for Aftermath CM

The EU’s Crisis Coordination Arrangement – CCA

For emergencies/crises, more specifically crises having a harsh and broad impact on several MSs, are of rapidly spreading nature and/or of political significance that require coordination on political level within the EU, there is the EU emergency and crisis coordination arrangement (CCA). The CCA was formally agreed in 2005. The main purpose of the CCA is to facilitate the ability of the MSs and the commissions to coordinate the information to the public and CM actions. Crises which develop slowly and over time or more “ordinary” crises affecting MSs shall be managed according to the ordinary procedures and structures within the EU.

The Presidency shall in consultation with the affected MSs, with assistance from the Council Secretariat and the Commission, decide whether or not a crisis calls for the triggering of the CCA in Brussels.

The core function of the CCA consists of the CCA Steering Group that is set up in relation to a crisis, thus not being a permanent structure. The group shall prepare and facilitate the decision-making process of COREPER II 40 – COREPER II 40 includes the permanent representatives of all MS on the following four Councils: economic and financial affairs, foreign affairs, general affairs, justice and

⁵¹ FOCUS Project, SitCen,

<http://www.focusproject.eu/documents/14976/0/CBRA+analysis+of+EU+Situation+Centre>

home affairs⁵². The group brings together the Council Presidency (the permanent representative), affected MSs (permanent representatives), and the General Secretariat of the Council. The group works as a preparatory body to decision-making in COREPER II, where decision is taken on planned actions to be undertaken. A decision is then formally taken by the Council.

The Steering Group replaces the normal working procedures in the Council. The Group supports the Presidency in identifying proposals for possible EU responses to the crisis.

To support COREPER and the Steering Group, there is a CCA Support Machinery that gives advice adjusted to the specific crisis. The need of support from the Support Machinery is coordinated by a Support Group that is composed by officials from the Council Secretariat and the Commission, namely: The Director of SITCEN (Joint Situation Centre); the Head of the Councils Press Office; the spokesperson of the HR/VP and of the Commission; Commissions ARGUS- representative as well as other specific expertise needed from for example the Presidency or the MSs’.

A MS or an EU-body that has acknowledged a crisis may activate the CCA through a specific call to the SITCEN. The Director of SITCEN in turn informs the Presidency, the Directors of the Private Office of the Secretary-General and Deputy Secretary-General of the Council and the Commission (ARGUS duty service) about the situation. The Presidency’s EU ambassador confers with the Council Secretariat (Secretary-General) and the Commission (Secretary- General) and the EU ambassadors of the affected MSs whether or not to trigger the CCA and activate the Crisis Steering Group. The formal decision is taken by the Presidency’s EU ambassador in discussion with its government.

Joint Situation Centre (SITCEN)

The EU Situation Centre is implemented within the Council General Secretariat and is run by the European Union Military Staff (EUMS). It provides 24/7 intelligence, analysis and early warning and serves as communications hub for the HR/VP and the European Union Special Representatives (EUSR).

3.2 Organisational cooperation

Three main coordination and cooperation activities could be highlighted from the EU actors in the Crisis Management occurrence:

1. CSDP Coordination with Civil Disaster Response and MSs
2. Coordination and cooperation with UN/OCHA
3. Coordination and cooperation with NATO/EADRCC

⁵² European Council, Coreper II, <http://www.consilium.europa.eu/en/council-eu/preparatory-bodies/coreper-ii/>

3.2.1 CSDP Coordination with Civil Disaster Response and MSs

In case of a major disaster abroad, the European Emergency Response Centre at DG ECHO requests military assets (mostly available transportation capacities) from the EU Movement Planning Cell within the EUMS (EEAS). The request is then preceded to the Multinational Movement Coordination Centres in Eindhoven (air transport) and Athens (transport by sea). From there the national Points of Contacts (typically within the national Ministries of Defence) are contacted and asked for available assets on a case-by-case basis. The gathered information is reported back to the EUMS that in turn coordinates the different possible contributions from MSs and reports back to DG ECHO. In order to allow for fast reactions the PSC is only involved, if bigger assets are requested. As for all CSDP instruments, there is no action foreseen for incidents inside the EU.

Despite political issues for the CSDP bodies to act inside the EU, every year the EUMS is involved in a large scale, though table-top exercise, the Crisis Coordination Arrangement Exercise (CCAEx), that plays through a large scale disaster affecting several MSs (coordinated by SITCEN).

3.2.2 Coordination and cooperation with UN/OCHA

There are no legal provisions for disaster response in an international context beyond customary law. There are, however, non-binding guidelines and agreements that have been developed, for example within the framework of the Inter-Agency Standing Committee (IASC), which are highly accepted among most of the humanitarian organizations. Humanity, neutrality, impartiality and independence are the leading principles for humanitarian assistance. Moreover the so called “humanitarian imperative” prevails, which means that humanitarian needs that occur in a country first shall be managed by the affected country. However, if the state or other institutions in the country are not able to manage the humanitarian situation, other countries and organizations have got a responsibility to provide support in accordance with international law.

When crises and disasters strike outside the EU, the UN (namely the UN Office for the Coordination of Humanitarian Affairs, OCHA), has got the overall responsibility to coordinate all humanitarian assistance to a stricken country. This is a provision that is highly acknowledged within the EU, among the Commission and most of the MSs. When the EU Civil Protection Mechanism was established in 2001 MSs’ humanitarian assistance to an affected country could from that day on not only be given for example bilaterally or through the UN, but also through the EU. Thus there was a need to broaden cooperation between the EU and UN as regards humanitarian assistance from the already existing cooperation in relation to financial aid to cooperation in humanitarian assistance missions as well. A core ambition of the EU today is to enhance cooperation with other international actors, especially the UN.

At present, the humanitarian aid system is undergoing a reform. In 2005 criticism was put forward regarding the lack of coordination in the humanitarian system. The purpose of the reform is to enhance predictability, accountability and partnership. The UN has got two main coordinative functions.

- First, OCHA coordinates the humanitarian actors within the so called “cluster-system”⁵³. This system was also created as a result of the humanitarian reform. There are around 10 clusters which are led by appointed cluster leads (UN bodies), for example: Coordination of camps (UNHCR/IOM), water and sanitation (UNICEF), health (WHO), emergency shelter (UNHCR/IFRC), food and nutrition (UNICEF), IT/telecommunications (OCHA/UNICEF/WFP); logistics (WFP), early recovery (UNDP), education (UNICEF and Save the Children Alliance) and agriculture (FAO).
- Second, OCHA coordinates humanitarian actors within the On-Site Operations Coordination Centre (OSOCC). The purpose of the OSOCC is to assist the local authorities to manage the disaster by for example coordinating international search and rescue teams. Moreover, the OSOCC enables the exchange of information and coordination between involved actors, which include governmental and non-governmental organisations, but also regional organisations like the ERCC.

3.2.3 Coordination and cooperation with NATO/EADRCC

Besides the EU and the UN, states cooperate within NATO/ Euro-Atlantic Partnership Council (EAPC) to coordinate disaster relief assistance in case of an emergency. The Euro- Atlantic Disaster Response Coordination Centre (EADRCC) is the focal point.

CM is one of NATO's fundamental security tasks. It can involve military and non-military measures to respond to a threat, be it in a national or an international situation. NATO began developing Civil Protection mechanisms in the event of a nuclear attack as early as the 1950s. NATO member countries soon realized that these capabilities could be used effectively against the effects of disasters induced by floods, earthquakes or technological incidents, and against humanitarian disasters. An assistance scheme first set up in 1953, in the aftermath of devastating flooding in Northern Europe, was comprehensively reviewed in 1995 when it became applicable to partner countries in addition to NATO member countries. As a result, the Euro-Atlantic Disaster Response Co-ordination Centre was established in 1998 to co-ordinate aid provided by different member and partner countries to a disaster-stricken area in a member or partner country. NATO also established a Euro-Atlantic Disaster Response Unit, which is a non- standing, multinational mix of national civil and military elements that have been volunteered by member or partner countries for deployment to the area of concern⁵⁴.

The Euro-Atlantic Disaster Response Coordination Centre (EADRCC) is a “24/7” focal point for coordinating disaster relief efforts among NATO member and partner countries. The EADRCC’s main function is to coordinate the response of NATO and partner countries to natural or man-made disasters within the Euro-Atlantic area. The Centre has guided consequence management efforts in more than 45 emergencies, including fighting floods and forest fires and dealing with the aftermath

⁵³ Chiaudani F., Improving coordination in humanitarian aid: reflections on the cluster system, <http://reliefweb.int/report/world/improving-coordination-humanitarian-aid-reflections-cluster-system>

⁵⁴ NATO, Crisis management, http://www.nato.int/cps/en/natolive/topics_49192.html

of earthquakes. Since 11 September 2011, the EADRCC has also been tasked with dealing with the consequences of CBRN incidents, including terrorist attacks. Most recently, the countries of the Mediterranean Dialogue (MD) and the Istanbul Cooperation Initiative (ICI) were given direct access to the Centre. The Centre also functions as an information-sharing tool for NATO and partner countries on disaster assistance. It organises seminars to discuss lessons learned from NATO-coordinated disaster response operations and exercises. In addition, it holds an annual large-scale field exercise with a realistic scenario for effective interaction. Recent exercises have included scenarios such as a terrorist attack using chemical agents.

All these tasks are performed in close cooperation with the European Union (in particular the Monitoring and Information Centre) and the United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA), which retains the primary role in the coordination of international disaster relief operations. The EADRCC is designed as a regional coordination mechanism, supporting and complementing the United Nations in its efforts. Furthermore, the EADRCC's primary function is coordination rather than direction. In the case of a disaster requiring international assistance, it is up to individual NATO and partner nations to decide whether to provide assistance, based on information received from the EADRCC.^[3]

Furthermore we can report that, at strategic level, CSDP Crisis management tasks are implemented by the following coordinated bodies: CMPD, EUMS, CPCC, Situation Centre, Satellite Centre, EDA.

Beside the CMPD, EUMS, CPCC described in the organisation chapter, the EEAS has a number of 24/7 monitoring and rapid response centres, notably the Situation Centre, the European Union Satellite Centre, the Watch-keeping Capability, and the Crisis Room. Their role is to purely gather information on crisis regions (within the realm of foreign, security and defence matters) and disseminate it to Member States, Brussels authorities, and EU actors on the ground. Discussions are currently ongoing internally as to the rationalisation of these response rooms. The European Defence Agency (EDA)'s role is instead to stimulate the development of capabilities meeting specific CSDP missions requirements. The Capability Development Plan identifies the needs in the capability field and suggests to MS different ways in which those capabilities should be shared, pooled or developed via common programmes in order to deliver deployable means for the conduct of CSDP operations.^[2]

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

For the aspect of CM concerned with the solidarity actions within the EU Member States, the work on SOPs is part of the recommendations towards the European Commission in the Council Conclusion on Host National Support of 2nd December 2010:

“Consider whether the use of agreed standards and certificates regarding the quality of assistance and personnel offered could facilitate overcoming existing legal issues/barriers and step up work on Standard Operational Procedures (SOPs) for modules so as to improve the overall Host Nation Support”⁵⁵.

For the International co-operation, instead, in 2007, the European Commission and OCHA agreed on Standing Operating Procedures (SOPs). These procedures have not been updated since then, thus not reflecting the merge of EU Civil Protection to DG ECHO and the new provisions of the Lisbon Treaty.

4.2 Operations planning

The recently adopted “implementing rules of pool of asset” give a mandate to ERCC for the definition of response plan for each kind of CM intervention. However, no specific standards to follow have been defined.

4.3 Logistics support in crises

When the transport is managed directly from the donor Member States, up to 55% of the costs of transporting assistance (and up to 85% in certain circumstances) can be co-financed by the European Commission. The case of 85% co-funding sees on the situation of the so called “registered asset”, the CM modules each member States have pre-declared as available to be employed, under voluntary base, in the CM operation coordinated from the Emergency Response Coordination Center (ERCC). Furthermore, a funding of 100% is foreseen in case of temporary warehousing of critical assets in transit during the transport toward and backward from the crisis areas.

Recently, the emergency defined by the Ebola crisis, create the condition in DG-ECHO for supporting a planned logistic, at least, in case of evacuation from the affected zone.

⁵⁵ Council conclusions on Host Nation Support,
http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/118145.pdf

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Public information and warnings fall under the unique responsibility of the single Member States. None of the European Organisations or Institution is committed to this scope.

The 112 Emergency European Number, is however the standardised emergency number for the whole European Territory.

5 Capabilities

5.1 Human resources

Beside the EU Commission, EEAS and EU Council personnel operating the CM structures described at chapter 3, the CSDP has the possibility to mobilize other human resources during CM missions.

Civilian CSDP missions are conducted mainly using personnel seconded by MSs and all civilian personnel serve in the missions on a voluntary basis.

The EU states to be able to plan and conduct simultaneously a series of operations and missions, of varying scope⁵⁶:

- Two major stabilisation and reconstruction operations, with a suitable civilian component, supported by up to 10 000 troops for at least two years;
- Civilian-military humanitarian assistance operations lasting up to 90 days;
- Around a dozen CSDP civilian missions (inter alia police, rule-of-law, civilian administration, Civil Protection, security sector reform, and observation missions) of varying formats, including in rapid-response situations, together with a major mission (possibly up to 3000 experts) which could last several years.
- To take the decision to launch a mission within 5 days of the approval of the CM Concept by the Council and specific civilian CSDP capabilities to be deployable within 30 days of the decision to launch the mission.

Four main priority areas of EU civilian CM of CSDP, the following capabilities are committed:

- Police: To carry out police operations, from advisory, assistance and training tasks to missions. MSs have undertaken to provide more than 5000 police officers (5761), of which up to 1400 can be deployed in less than 30 days.
- Strengthening the rule of law: To strengthen or restore credible functioning judicial and penitentiary system. MSs have committed to provide 631 officers (prosecutors, judges, prison officers).
- Civilian administration: To strengthen or restore a functioning civil administration; a pool of experts of 565 in total to be deployed at very short notice.
- Civil Protection: The aim of the Civil Protection priority area in the context of EU CM was envisioned to provide, or assist in providing, all possible protection and support to ensure the survival of populations during a crisis while at the same time it was underlined and recognized that this type of interventions to respond emergencies are of a humanitarian nature. The priority area of Civil Protection has not gained the same weight as the other three priority areas of CSDP civilian CM.

⁵⁶ Jochen Rehl and Galia Glume, Handbook on CSDP Missions and Operations – The Common Security and Defence Policy of the European Union, http://eeas.europa.eu/csdp/structures-instruments-agencies/european-security-defence-college/pdf/handbook/final-handbook_on_csdp_missions_and_operations.pdf

Furthermore the mechanism is providing the so called Civilian Response Teams (CRTs). Civilian Response Teams are not per se a priority area but an instrument to be used for 1) early assessment of a crisis situation, 2) in support of the establishment of a civilian CSDP mission (when appropriate), 3) in temporary support of a EUSR or an ongoing civilian CM operation. Approximately 200 experts belong to the CRT pool with a variety of expertise.

5.2 Materiel (non-financial) resource

The main material resources connected with the European Civil Protection mechanism are not directly owned by the European Institution; the resources are committed from the MS organisations and organised by using the concept of Modules.

The Modules are considered by the Commission to be the type of resources most used and therefore needed for operations⁵⁷.

Modules are the heavy type of inventoried resources. They are the type of complex and large resources that would be mobilised for major disasters. The Modules are the results of an EU pilot project launched in 2007 with the objective to enhance European preparedness and response efforts. The Commission invited Member States to structure their national civil protection resources in so-called civil protection modules, consisting of task and needs-driven pre-defined multinational arrangements. This was a way to better structure the EU response system with self-sustained service packages. The intention was also to provide a standardised model for Member States to better structure and coordinate their resources.

Modules should therefore comply with a set of criteria/requirements defined in a technical framework under the Mechanism, in particular be self-sufficient - meaning deployable at short notice with the necessary logistics (accommodation, power supply, sanitation, storage, etc) for a period of 96 hours (or more, depending on the type of asset) – and interoperable together and with third responders. Modules could be established by Member States in 13 pre-defined areas of intervention to which the Commission added 4 additional categories in 2010 (see diagram). They were and are still considered to be the one most useful for disaster response. In January 2009, the European civil protection rapid response capacity included a total of 86 modules registered in the CECIS database. It was foreseen that this number would increase in 2010 by 39 additional modules, meaning 47% of the total number of modules registered with the effect of increasing the balance between the modules (see table hereunder).

⁵⁷ DG ECHO, EU Civil Protection mechanism, http://ec.europa.eu/echo/what/civil-protection/mechanism_en

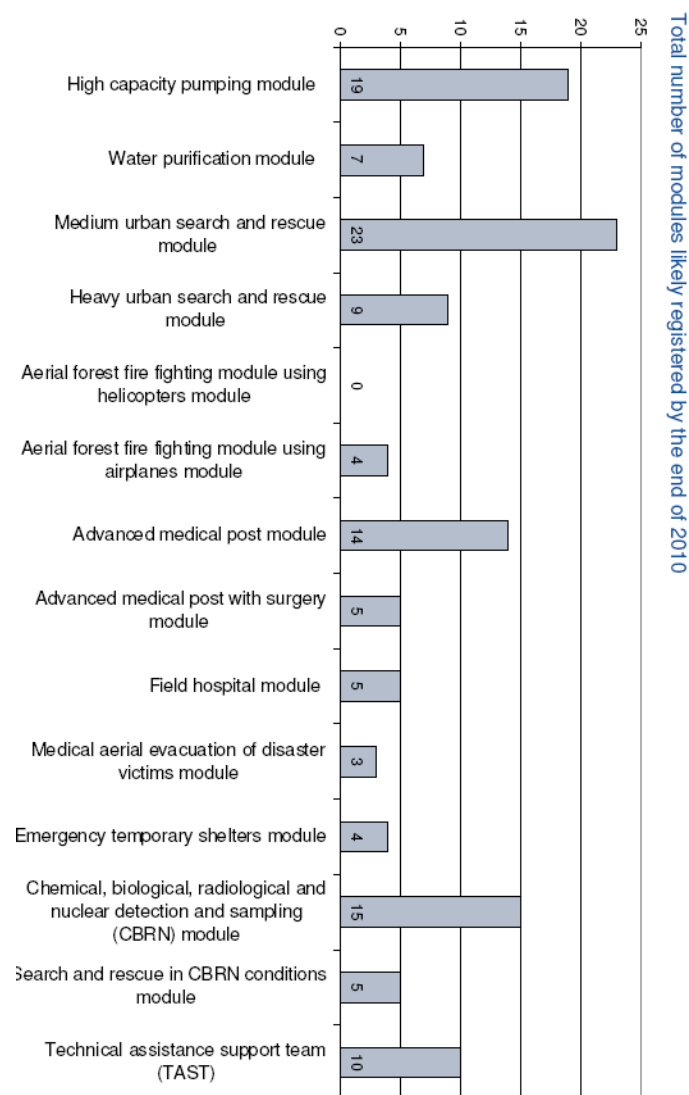


Figure 8: CM Modules

The diagram shows that most of European capacity is concentrated in:

- medium urban search and rescue
- high capacity pumping
- CBRN detection and sampling
- advanced medical posts.

A few modules have also been registered for heavy urban search and rescue, water purification, forest fire fighting with planes, search and rescue in CBRN conditions, advanced medical posts with surgery, medical aerial evacuation and field hospitals. The Mechanism's capacity also includes technical assistance support teams (TASTs) providing support functions to the Modules and Assessment Teams, such as kitchens, shelter, IT, logistics, communications, etc. (of which 7 have been registered).

In addition to resources complying with the requirements of civil protection modules, Member States have additional response capabilities that can be deployed for external assistance on an ad hoc basis.

Since these assets are not standardised in modules, the inventory developed by Ecorys (see table hereunder) has some gaps, particularly because Member States' reporting varied in terms both of item descriptions and their quantification (if at all). Therefore, the table does not include quantities of these additional types of resources, because a meaningful attempt to quantify is not possible with the currently available information. Indeed, as already explained, the European Commission itself does not have a comprehensive, up-to-date database of non-standardised national assets. Furthermore, the ERCC (Emergency Response Coordination Centre) has not quantified assets such as tents and sandbags which are presumed to exist in large quantities.

Table 2: Response Resources by types

Other reported types of response resources	
First aid / medical care related resources	First aid and emergency care (including psychological and psychosocial support)
	Emergency mobile hospital
Logistics / transport related response resources	Transport, logistics and storage
Maritime response related resources	Marine Pollution team
	Marine SAR team
	Technical Diving Team
	Diving rescue team
	EMSA capacities (see description below)
Search and rescue related resources	Canine search and rescue team
Sampling and detection related resources	Detection and handling of explosive material
	Decontamination in case of a biological and or chemical attack
	Sample collection teams with equipment (Chemical)
	Decontamination in case of a radiological or nuclear attack
	Detection teams with equipment (Radioactivity)
	Ecological laboratory with mobile unit
Fire fighting related resources	Fleet of medium to high capacity aircraft used in 2007 by the Member States includes 24 for France, 16 for Italy, 18 for Portugal, 27 for Spain and 21 for Greece
Assistance / support related resources	Expert pool
	Coordination/assessment experts
	Water purification
	Container kitchens / Emergency food supplies
	Emergency shelter

In addition to Modules and national response resources, we can also add a third category of response capabilities, namely disaster-specific response tools financed directly by the EU, via its own agencies (such as oil spill response tools) or via so-called “pilot-projects” under the request of the

European Parliament (as is the case for firefighting related resources) (both are included in table 7 above).

The EU oil spill response capacity includes a set of pre-positioned response vessels not owned, but directly contracted by the European Maritime Safety Agency (EMSA) which can be used, through the ERCC, in case of civil protection needs⁵⁸. However, while the resources available are extensive, it is not certain that they are fully able to respond to major disasters, particularly as a rapid reaction force⁵⁹. The Figure and Table on page 61 indicate the current contracted EMSA specialised oil spill response vessels.

The EU also launched a pilot project, the EUFFTR – European Fire Fighting Tactical Reserve – with the aim of providing an overview of the firefighting fleets of the Member States. Information made available to the Commission included 24 medium to high capacity airplanes for France, 16 for Italy, 18 for Portugal, 27 for Spain and 21 for Greece. Some Member States not particularly subject to fire disasters do not have their own capabilities. As part of this pilot project the Commission also purchased with a framework contract two fire-fighting aircraft Canadair from a private company. These are located in Bastia under the responsibility of the French crisis management authorities, but are to be deployed directly by the ERCC according to a pre-defined timeframe. This is intended particularly to support countries without their own capabilities or provide a tactical reserve in case national resources are insufficient⁶⁰.

Furthermore, military resources can be requested if a disaster critically overwhelms non-military response capacities, as recalled by the so-called “European Consensus on Humanitarian Aid” signed by all EU Member States and Institutions. It underlines the limited and supportive role that military assets should play when used in a disaster relief context, and recalls the need to follow the relevant OCHA guidelines in this respect. The guidelines reaffirm the basic principles of humanitarian intervention (humanity, neutrality, and impartiality) and underline that military assets should play a complementary, last resort role in humanitarian and civil protection interventions:

- Military assets should be seen as a complementary tool to existing relief capabilities so as to provide specific support to specific requirements;
- All relief is under the overall responsibility of the affected state, and is complemented by military assets;
- Such assets should in principle be unarmed;
- Such assets should be used by the UN as a last resort, i.e., in the absence of other effective civilian solutions to fill an urgent need;
- The role of military assets should not be direct humanitarian assistance;
- The use of such assets should be clearly defined in time;
- Such assets should be self-supporting during their time of deployment to a disaster zone;

⁵⁸ ECORYS, Strengthening the EU capacity to respond to disasters, pp. 138-141.

⁵⁹ Ibid.

⁶⁰ European Commission, EU countries assist Greece in fighting forest fires, http://europa.eu/rapid/press-release_IP-09-1249_en.htm?locale=en

- On-site civ-mil coordination are under the guidance of the humanitarian aid coordinator. Critical areas for coordination include security, logistics, medical, transportation, and communications.

In the event of a major disaster the EUMS it is also able to provide a strategic movement coordination unit making use of the Multinational Coordination Centre for strategic lift in Athens and Eindhoven and coordinating with the relevant Point of Contacts in the MS.

“EUMS also runs databases that (i) are listing military assets of MS in the areas of transport, logistics, medical, CBRN (Chemical, biological, Radiological and Nuclear) and engineer support and (ii) are providing contact data of experts from various fields of expertise who can be called at short notice”⁶¹.

Finally, the ERCC has at its disposal, within the CECIS, a ‘Pool of Experts’ database. This database comprises experts disposing of Mechanism training (OPM or higher), who are “in principle available” at short notice for Assessment and Coordination missions sent through the ERCC. It was foreseen at its inception that Participating States would appoint Contact Points in charge of updating yearly the availability of experts. It should be noted, however, that the system was up for review by the end of 2009.

5.3 Training

The Civil Protection Mechanism runs an active and comprehensive training programme, offering experts a deeper knowledge of the requirements of European civil protection missions, and improving their coordination and assessment skills.

The programme offers a wide range of courses from basic training to high-level courses for future mission leaders. Special courses are also available aiming to prepare for specific aspects for missions, such as security training or assessments.^[1]

To ensure an efficient, rapid and flexible response, an extensive training programme is available for national technical, coordination and assessment experts, as well as for personnel involved in the civil protection modules.

The training programme is an essential part of the Community Mechanism. It is crucial in preparing experts for international civil protection assistance interventions inside, as well as outside the European Union. It also provides an excellent platform for experience-sharing and networking between national experts from participating countries. The programme involves training courses, joint simulation exercises and an exchange programme, where experts can learn first-hand about similar responsibilities under different national systems.

⁶¹ ACRIMAS Project, D2.1 Current CM Frameworks,
http://www.acrimas.eu/attachments/article/5/D2.1_ACRIMAS_Report_on_CM_Framework_v2-1.pdf

Since it was launched in 2004, the training programme has developed and expanded significantly and now includes 12 courses. The target group is wide, which opens the training programme to many different categories of experts. These can range from assessment and coordination experts to specialists within a certain field of work, such as marine pollution experts, environmental experts (landslides waste management, dam stability etc), experts in geo-hazards or logistics in emergency operations, and medical staff.

All courses combine theory and field experience, as well as international guidelines and standard operating procedures. They all contain practical exercises (field and table-top) based on different emergency scenarios where participants get the opportunity to practise their skills in a realistic setting.^[6] The proposed courses are represented in the following picture.

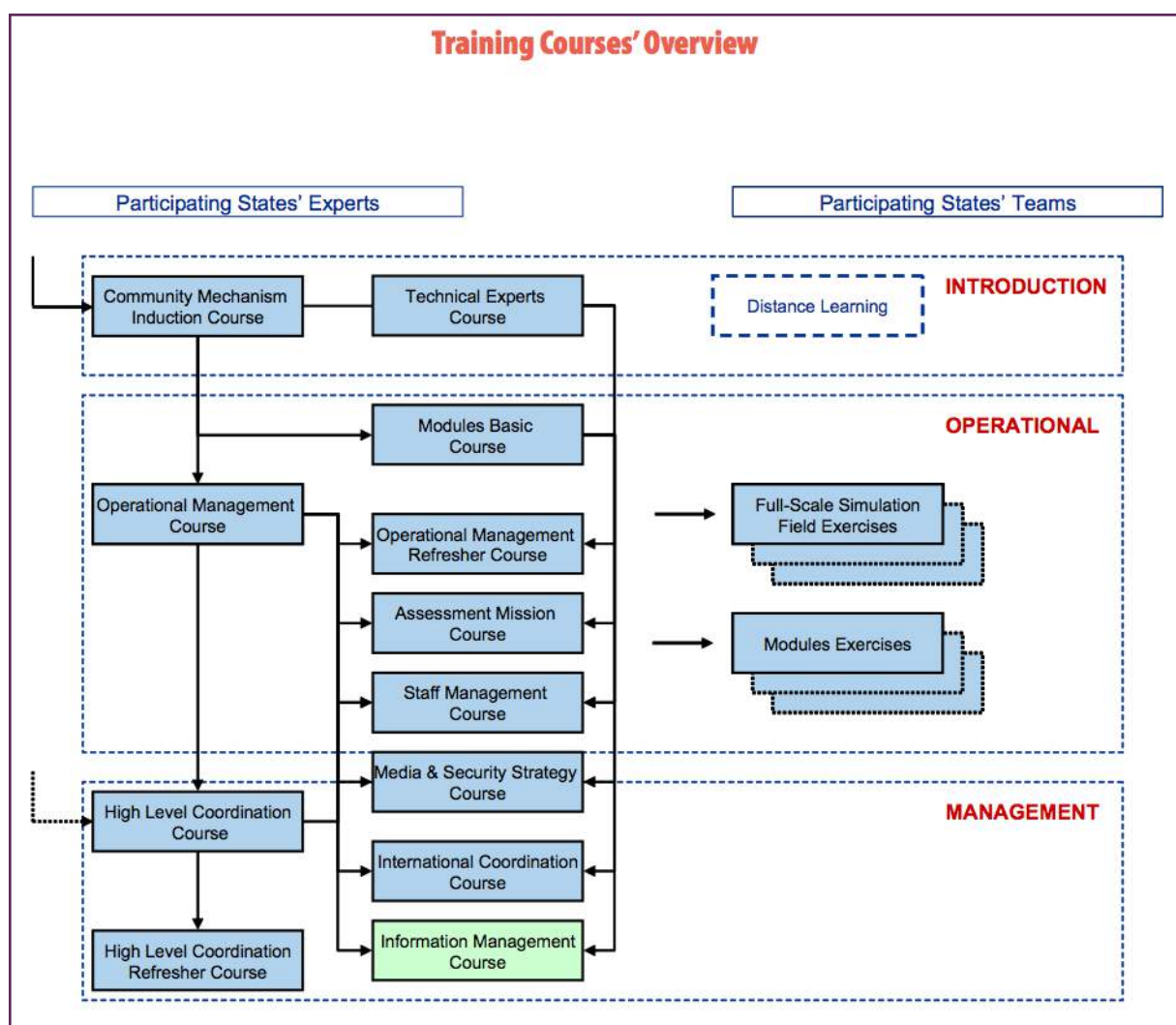


Figure 9: Training Courses

Trainings furthermore are grouped in these categories:

- Community Mechanism Induction Course (CMI). The Community Mechanism Induction Course (CMI) is a six-day introductory course and the entry point to all courses offered within the

Community Mechanism training programme. The course is aimed at team leaders, deputy team leaders, managers, experts and administrators who are likely to be involved in international civil protection assistance interventions. The overall objective of the CMI is to introduce participants to the Community Mechanism and provide them with the basic knowledge and skills to prepare themselves for international civil protection missions, both within and outside the Community Mechanism's geographical area.

- Operational Management Course (OPM). The Operational Management Course (OPM) is the second course in the training programme and is open to those who have previously followed the Community Mechanism Induction Course (CMI). The six-day course targets national experts and European Commission officials who have been selected as potential team members or liaison officers of an assessment or coordination team sent by the European Commission to facilitate assistance support and coordination in the field.
- High Level Coordination Course (HLC). The High Level Coordination course (HLC) is the third general course in the training programme and is aimed at experts who have been selected as managers of a team deployed by the European Commission to facilitate coordination assistance in emergencies. HLC participants should have followed the Community Mechanism Induction (CMI) course and the Operational Management Course (OPM), before attending this course.
- Operational Management Refresher Course (OPMR) and High Level Coordination Refresher Course (HLCR). The field of emergency response is a constantly changing environment. No two emergencies are exactly the same. New actors enter the field or existing ones have their mandate changed. Changing situations and the development of new techniques and equipment mean experts need to learn about the latest developments, as well as refresh knowledge gained on earlier courses. The training programme offers two such courses: the Operational Management Refresher Course (OPMR) and the High Level Coordination Refresher Course (HLCR). These courses are open to participants who have attended either the OPM or HLC.
- Assessment Mission Course (AMC). The Assessment Mission Course (AMC) is a five-day specialised course for those who have previously followed the Community Mechanism Induction (CMI) and the Operational Management Course (OPM). The intended target group is national experts and managers in the field of coordination, European Commission officials and experts from partner organisations likely to be involved in international civil protection interventions.
- Staff Management Course (SMC). The Staff Management Course (SMC) is one of the specialised courses open to participants who have completed the Operational Management Course (OPM). However, since this course is closely related to the Assessment Mission Course (AMC) and the Media and Security Strategy Course (MSC), it is recommended that participants who plan to attend all three courses do so in the following sequence: AMC, SMC, MSC.

- Media and Security Strategy Course (MSC). The six-day Media and Security Strategy Course (MSC) is one of the specialised courses open to participants who have completed the Operational Management Course (OPM). However, since this course is closely linked to the Assessment Mission Course (AMC) and the Staff Management Course (SMC), it is recommended that those who plan to attend all three courses should try to do so in the following sequence: AMC, SMC, MSC.
- International Coordination Course (ICC). The six-day International Coordination Course (ICC) is one of the specialised courses of the training programme and is open to participants who have completed the Operational Management Course (OPM).
- Information Management Course (IMC). The ability to provide accurate information in a timely manner to the appropriate stakeholders is of utmost importance during disaster response interventions in order to facilitate the delivery of assistance. Therefore, the five-day Information Management Course (IMC), focusing solely on information management, has been developed. The IMC is the latest addition to the training programme and is open to participants who have completed the Operational Management Course (OPM).
- Technical Experts Course (TEC). Experience from previous civil protection assistance interventions has shown that, as well as training assessment and coordination experts, there is also a need to train technical specialists for expert interventions. The Technical Experts Course (TEC) is a six-day course designed specifically for technical experts such as marine pollution and water management experts, environmental experts (landslides, waste management, dam stability etc), geo-hazard or logistics experts, medical staff and infrastructure engineers.
- Modules Basic Course (MBC). The Modules Basic Course (MBC) is a new course within the training programme. The target group is key staff from participating countries that would be deployed with their civil protection module to an emergency within or outside the European Union. Key staff can include team leaders, deputy team leaders, liaison officers or communications officers. It is recommended (but not compulsory) that participants attend the Community Mechanism Induction (CMI) course before going on to the Modules Basic Course (MBC).

For each cycle of training courses, the total number of course places are divided between the Participating States. This quota is based on the reported training needs of the country as well as the size of the country. To administrate training-related issues, each Participating State has appointed a national training coordinator who is responsible for identifying and nominating experts to attend the training courses. It is therefore not possible for individual national experts to sign up for a course directly. A list of national training coordinators can be found on the website of the Civil Protection Unit of the European Commission. Information on the training programme can also be found on the virtual On-Site Operations Coordination Centre (OSOCC), which is a virtual platform developed by the Emergency Response Coordination Centre (ERCC) in the United Nations Office for Coordination of Humanitarian Affairs (UN OCHA) in Geneva, Switzerland. To increase collaboration with other international actors and facilitate cooperation in the field, partners such as other European

Commission services, the United Nations and the Red Cross Red Crescent Movement are invited to participate in relevant courses.

The EU exchange of experts system is designed to complement a training programme tailored to the needs of civil protection interventions within the framework of the Community Mechanism for civil protection. It is open to the participating states of the civil protection mechanism and the following eligible third countries:

- Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey and “Kosovo” (this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence).
- Eastern Neighbourhood countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.
- Southern Neighbourhood Countries: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia.

The Civil Protection Mechanism's experts exchange system allows for the secondment of civil protection experts to participating states. This exchange of experts provides participants with knowledge and experience on all aspects of emergency intervention and the different approaches of national systems.

The objective is to learn different techniques used, study the approaches taken within other emergency services or other relevant organisations with special expertise, and/or present or follow short training modules. The duration of an exchange may vary from a few days to two weeks. By offering such a broad spectrum of possibilities, the EU exchange of experts makes a significant contribution to the further development of the Community mechanism for civil protection.

Since December 2006 the Federal Agency for Technical Relief (THW), Germany, has been appointed by the European Commission as coordinator of the EU exchange of experts. THW has been responsible for its promotion as well as for its administrative and financial management.

5.4 Procurement

5.4.1 Procurement regulation

In addition to financing decisions linked to humanitarian aid, the European Commission's Humanitarian Aid and Civil Protection department (ECHO) issues calls for tender for implementing specific activities. Such calls are regularly updated on the Calls for tender page (<http://ec.europa.eu/echo/node/623>).

The following table is reporting the call for tender topics from the 2008 up to date.

Table 3: DG-ECHO Calls for Tenders, 2008-2015 ^[1].

2015	Managing and further enhancing ECHO's ICT infrastructure and OMT's system
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administration and user support

Framework contract for the production and distribution of professional audio-visual material on ECHO's actions in the world

Pilot project in the area of Early Warning System for natural disasters

Provision of expertise to assist policy development in Humanitarian Aid and Disaster Risk Management

Provision of Insurance services for ECHO office in Nairobi, Kenya

European Disaster Response Exercise (EDREX)

Framework Contracts for services related to offering capacity to design, plan, conduct and evaluate Union Civil Protection Mechanism Training Courses (8 Lots)

Exercises on civil protection modules, technical assistance and support teams and European Union civil protection teams (4 lots)

2014 Provision of Cloud Services for ECHO

Exercises on civil protection modules, technical assistance and support teams and European Union civil protection teams

Development of a programme for peer reviews in the framework of EU cooperation on civil protection and disaster risk management

Programme of Exchange of Civil Protection Experts

2013 Provision of VSat Service & Mobile Satellite Telephony & Data Services for DG ECHO

Provision and replenishment of medical kits and other medical supplies in the EU and in third countries

ECHO-FLIGHT Service - Provision of air transport service for the Directorate-General for Humanitarian Aid and Civil Protection - ECHO

Exercises on civil protection modules, technical assistance and support teams and European Union civil protection teams

EU Aid Volunteers: Preparatory actions 2013

Supply of training and support services to the Directorate-General for Humanitarian Aid and Civil Protection (ECHO)

Evaluation of Implementation of the European Consensus on Humanitarian Aid

2012 Multiple Framework Contract for the Evaluation of Humanitarian Aid and Civil Protection Activities

Provision of transport and other logistic support services, in the EU and in third countries, in

the framework of Civil Protection and Humanitarian Aid operations

Establishment of the European Emergency Response Centre – provision, installation and maintenance of specialised equipment for crisis rooms

Exercises on civil protection modules, technical assistance and support teams and European Union civil protection teams

Audit support services

Framework contract for the production and distribution of Video News on DG ECHO's actions in the world

2011 Framework contract for the production and distribution of Video News on DG ECHO's actions in the world

Provision of expertise to assist policy development in humanitarian aid

Exercises for Civil Protection Modules and Technical Assistance and Support Teams (2 lots)

Framework contract for services related to offering capacity to design, plan, conduct and evaluate Community Civil Protection Mechanism Courses (7 lots)

Common Emergency Communication and Information System

Framework Audit Contract

2010 Preparatory Action on an EU rapid response capability (2010/C 64)

Design, plan, conduct and evaluate exercises for civil protection modules and technical assistance and support teams (2010/S94-140246)

Organisation of a European exchange of experts in civil protection (2010/S75-111239)

Strengthening the EU disaster management capacity - good practices on disaster prevention (2010/S 37-053087)

2009 Service Contract to provide Aircraft ground and air support services for the Commission's Directorate-General for Humanitarian Aid (ECHO) in Sub-Saharan- Africa with focus on the Democratic Republic of Congo (DRC) and on Kenya

2008 Framework contract for training services in humanitarian aid contracts

Beside the tenders a series of service contracts are issued in order to procure a more wide range of services and products relevant to the more ordinary administration. As an example, in 2013, the Directorate-General for Humanitarian Aid & Civil Protection (ECHO) of the European Commission signed 30 service contracts covering inter alia web communication and development, audiovisual productions, communication support and service, publications and visibility material, press relations,

other general communication actions, e.g. awareness raising activities in relation to the EU Children of Peace initiative and the launch of the Emergency Response Coordination Centre. The relevant contracts for provision of services are detailed below.

Table 4: DG-ECHO Service Contracts, 2013⁶².

Contract n°	Contractor	Action	Amount in EUR
ECHO/INF/BUD/2013/00001	SYSTEMAT	PURCHASE OF IT EQUIPEMENT	654,51
ECHO/INF/BUD/2013/00002	MOSTRA	COMMUNICATION SERVICES FOR CIVIL PROTECTION FORUM AND INAUGURATION OF EMERGENCY RESPONSE COORDINATION CENTER	121.426,89
ECHO/INF/BUD/2013/00003	CROIX-ROUGE DE BELGIQUE	VISIBILITY	4.925,00
ECHO/INF/BUD/2013/00004	ECONOCOM PRODUCTS & SOLUTIONS BELUX	PURCHASE OF IT EQUIPEMENT	2.685,51
ECHO/INF/BUD/ 2013/00006	PUBLICATIONS OFFICE OF THE EUROPEAN UNION	STORAGE AND MAILING SERVICE, 1st QUARTER 2013	1.902,92
ECHO/INF/BUD/2013/00007	PUBLICATIONS OFFICE OF THE EUROPEAN UNION	PRINTING OF LEAFLET	436,00
ECHO/INF/BUD/2013/00008	PUBLICATIONS OFFICE OF THE EUROPEAN UNION	PRINTING OF LEAFLET	436,00
ECHO/INF/BUD/2013/00011	EURONEWS CONVENTION	AUDIOVISUAL PRODUCTION	133.154,93
ECHO/INF/BUD/2013/00013	STICHTING EUROPEAN JOURNALISM CENTRE (EJC FOUNDATION)	VISIT BY JOURNALISTS TO EU-FUNDED HUMANITARIAN PROJECTS	56.885,26
ECHO/INF/BUD/2013/00015	ASSOCIATED PRESS TELEVISION NEWS LIMITED	AUDIOVISUAL PRODUCTION	4.090,00
ECHO/INF/BUD/2013/00016	CREASET	PRODUCTION OF VISIBILITY MATERIAL	3.123,50
ECHO/INF/BUD/2013/00017	NOVACOMM CONSORTIUM	WEB SERVICES AND DEVELOPMENT FOR 2013 AND 2014	465.000,00
ECHO/INF/BUD/2013/00018	PUBLICATIONS OFFICE OF THE EUROPEAN UNION	STORAGE AND MAILING SERVICE, 2nd QUARTER 2013	2.081,41
ECHO/INF/BUD/2013/00019	CREASET	PRODUCTION OF VISIBILITY MATERIAL	105.446,20
ECHO/INF/BUD/2013/00021	STICHTING EUROPEAN JOURNALISM CENTRE (EJC FOUNDATION)	VISIT BY JOURNALISTS TO EU-FUNDED HUMANITARIAN PROJECTS	54.152,26
ECHO/INF/BUD/2013/00022	D.P.I. SPRL	PRODUCTION OF VISIBILITY MATERIAL	300,00
ECHO/INF/BUD/2013/00023	INTERNATIONAL RESCUE COMMITTEE	EVENT	530,00
ECHO/INF/BUD/2013/00024	MUSIC&SOUND	PURCHASE OF CAMPAIGN MATERIAL	81,10
ECHO/INF/BUD/2013/00025	TIPIK	COMMUNICATION SUPPORT AND SERVICES FOR 2014	120.000,00
ECHO/INF/BUD/2013/00026	CREASET	PRODUCTION OF VISIBILITY MATERIAL	3.160,00
ECHO/INF/BUD/2013/00027	AVP SA/NV	RENT AND INSTALLATION OF EQUIPMENT FOR "AIDEX" EVENT	422,50
ECHO/INF/BUD/2013/00028	CRAENEM	PURCHASE OF MAPS	1.032,78

⁶² DG ECHO, Service Contracts, http://ec.europa.eu/echo/funding-evaluations/public-procurement/service-contracts_en

ECHO/INF/BUD/2013/00029	IGEP	PRINTING OF CALENDARS 2014	2.475,00
ECHO/INF/BUD/2013/00030	PUBLICATIONS OFFICE OF THE EUROPEAN UNION	STORAGE AND MAILING SERVICE, 3rd QUARTER 2013	2.686,57
ECHO/INF/BUD/2013/00031	ASSOCIATED PRESS TELEVISION NEWS LIMITED	AUDIOVISUAL PRODUCTIONS	119.648,00
ECHO/INF/BUD/2013/00032	IGEP	PRODUCTION OF VISIBILITY MATERIAL	14.546,48
ECHO/INF/BUD/2013/00033	MOSTRA	AUDIOVISUAL PRODUCTION	34.075,45
ECHO/INF/BUD/2013/00034	MOSTRA	AUDIOVISUAL PRODUCTION AND PHOTOGRAPHY	5.130,78
ECHO/INF/BUD/2013/91001	MOSTRA	ORGANISATION OF EVENT AND CAMPAIGN	349.696,21
ECHO/INF/BUD/2013/91002	FONDAZIONE PUNTO.SUD	DEVELOPMENT AND MAINTANCE OF PARTNER WEBSITE	68.200,00

5.4.2 Procurement procedures

The procurement of major services (training, logistic frameworks, etc.) are defined by the single Unit within the European Commission Directorate General in the form of “call for proposal”. This preliminary definition is then posed under an “inter-service consultation” where all the other Directorate Generals could provide suggested amendment, and under a consultation given from the relevant Program Committee composed by representatives of each Member States. The final configuration will finally be published as part of the annual work programme implementation.

5.5 Niche capabilities

No niche capabilities are available directly under the EU organisations dealing with the Crisis Management.

Resources

Legislative acts

European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12007L%2FTXT>

Regulation No 375/2014 of the European Parliament and the Council

REGULATION (EU) No 375/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Voluntary Humanitarian Aid Corps ('EU Aid Volunteers initiative'), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0375&from=EN>

Other normative acts

Council Conclusion on Host National Support of 2nd December 2010

Council conclusions on Host Nation Support, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/118145.pdf

DECISION No 1313/2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on a Union Civil Protection Mechanism, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1313&from=EN>

COUNCIL DECISION establishing a Civil Protection Financial Instrument, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007D0162&from=EN>

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS 2011 Annual Report on the Instrument for Stability, http://eur-lex.europa.eu/resource.html?uri=cellar:2ec28dd4-ecfd-492e-8e83-24c2f9da87b3.0001.02/DOC_1&format=PDF

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DG-ECHO / ERCC, Oct. 2014



Driving Innovation in Crisis Management for **E**uropean **R**esilience

UNITED NATIONS (UN)

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Rachel Beerman and Linette de Swart)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by EOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

On 19 December 1991, the General Assembly adopted the UN General Assembly resolution 46/182 on “Strengthening of the coordination of humanitarian emergency assistance of the United Nations”, outlining an enhanced framework for international humanitarian assistance. When providing emergency assistance, the international community is guided by this resolution. Among the guiding principles for humanitarian assistance, it states that humanitarian assistance must be provided in accordance with the principles of humanity, neutrality and impartiality and with the consent of the affected country; each state has the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory; affected states in need of assistance should facilitate the work of these organisations in implementing assistance.

In the field of disaster and crisis management, the UN General Assembly itself does not have any operational role in conducting disaster management activities, but rather is responsible for launching many of the programmes, which are then carried out by the various UN offices and UN Member States governments. Through its many offices, agencies, programmes and funds the UN supports nations to reduce hazard vulnerability while building local institutional capacity. It is among the first organisations to arrive when disaster strikes, and in the aftermath it remains on the ground to assist recovery. Each of these UN bodies has been given a mandate to provide or coordinate international crisis management assistance within their respective field. Therefore, this report focuses on the three most prominent bodies that have mandates pertaining to crisis management and disaster risk reduction, namely the UNISDR, UNDP and OCHA.

UNISDR serves as the focal point for all international disaster risk reduction efforts, supported by UNDP, which has lead operational responsibility for natural disaster mitigation, prevention and preparedness. OCHA, together with the Inter-Agency Standing Committee (IASC) is the arm of the UN responsible for bringing together national and international humanitarian actors in the event of an emergency or crisis to ensure a coherent response, while UNDP serves as the leader of Early Recovery Cluster, coordinating and implementing all early recovery activities in the aftermath of a disaster. Financing for preparedness and response is provided through various combinations of the UN Regular Budget as well as from Member States’ voluntary contributions.

Table of Contents

UNITED NATIONS (UN) Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	104
Overview.....	105
Table of Contents	106
List of Figures	108
List of Tables.....	108
List of Abbreviations.....	109
1 Policy	110
1.1 Risk Assessment	110
1.2 Policy and Governance	112
1.2.1 Strategy scope and focus	113
1.2.2 Monitoring and analytical support to policy making; R&D	117
1.2.3 Policy for Prevention	117
1.2.4 Policy for Preparedness	118
1.2.5 Policy for Response	120
1.2.6 Policy for Relief and Recovery	121
1.3 Financing	122
1.3.1 Investing in preparedness	122
1.3.2 Investing in consequence management	125
1.4 Policy review, Evaluation & Organisational Learning	126
1.4.1 Post-Disaster Assessment	126
1.4.2 Departmental Lessons Learned systems	127
1.4.3 Centralised (national) Lessons Learned system	127
1.4.4 International exchange for Lessons Learned	127
1.4.5 Regular policy reviews	128
1.5 Resilience	128
1.6 Information sharing and data protection	129
2 Legislation	131
2.1 Crisis (emergency, disaster) management concept.....	131
2.2 General crisis (emergency, disaster) management law	132
2.3 Emergency rule	132

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	132
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	132
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	133
2.7	Legal regulations for international engagements of first responders and crisis managers	133
3	Organisation	134
3.1	Organisational chart.....	135
3.1.1	UNISDR	135
3.1.2	UNDP	136
3.1.3	UN-OCHA	137
3.1.4	The Inter-Agency Standing Committee	141
3.2	Organisational cooperation	143
3.2.1	Operational cooperation	143
3.2.2	Organisational cooperation	144
4	Procedures	146
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	146
4.2	Operations planning.....	148
4.3	Logistics support in crises	150
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	152
5	Capabilities	154
5.1	Human resources	154
5.2	Materiel (non-financial) resources	155
5.3	Training	156
5.4	Procurement	158
5.4.1	Procurement regulation	158
5.5	Niche capabilities	160
	Resources	161
	Legislative acts	161
	Other normative acts	161
	Official documents (white papers, strategies, etc.)	162
	Online resources (e.g. websites of key CM organizations)	162
	Publications	164

List of Figures

<i>Figure 1: UNDP steps for comprehensive risk assessment</i>	<i>112</i>
<i>Figure 2: DRR Focus of UNDP</i>	<i>115</i>
<i>Figure 3: 2014 Contributions Received and Pledged</i>	<i>123</i>
<i>Figure 4: UN-OCHA Budget by source of funding</i>	<i>124</i>
<i>Figure 5: UN-OCHA 2014 Budget Summary</i>	<i>125</i>
<i>Figure 6: UN System Organisation Chart</i>	<i>134</i>
<i>Figure 7: OSOCC Management Structure</i>	<i>139</i>
<i>Figure 8: IASC Subsidiary Bodies</i>	<i>142</i>
<i>Figure 9: OSOCC Context</i>	<i>144</i>
<i>Figure 10: SOP for designating sector/cluster leads in major new emergencies</i>	<i>146</i>
<i>Figure 11: Standard operating procedures for activation and deployment of Early Recovery Support for Disasters</i>	<i>148</i>
<i>Figure 12: On-site command, control and coordination structure during emergencies outside the EU</i>	<i>149</i>
<i>Figure 13: Reporting Lines during emergencies outside the EU</i>	<i>150</i>
<i>Figure 14: UN-OCHA staff members by location, 2014</i>	<i>154</i>
<i>Figure 15: UNDAC Training</i>	<i>157</i>

List of Tables

<i>Table 1. UN-OCHA Clusters and Cluster Leads</i>	<i>138</i>
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List of Abbreviations

AST	Americas Support Team
BCPR	Bureau for Crisis Prevention and Recovery
CADRI	Capacity for Disaster Reduction Initiative
CMCS	Civil-Military Coordination Section
CPR-TTF	Crisis Prevention and Recovery Thematic Trust Fund
EEU	Environmental Emergencies Unit
EPS	Emergency Preparedness Section
ERCC	Emergency Relief Coordination Centre
ESB	Emergency Services Branch
FCSS	Field Coordination Support Section
FIS	Field Information Services Unit
HC	Humanitarian Coordinator
HCT	Humanitarian Country Team
HIC	Humanitarian Information Centres
IHP/APHP	International and Asia-Pacific Humanitarian Partnerships
INSARAG	International Search and Rescue Advisory Group
IRIN	Integrated Regional Information Networks
ISDR	International Strategy for Disaster Reduction
ITS	Information Technology Section
LSU	Logistics Support Unit
MCDA	Military and Civil Defence Assets
PDSB	Policy Development and Studies Branch
RC	Resident Coordinator
SCS	Surge Capacity Section
STAG	Scientific and Technical Advisory Group
UN-CMCoord	United Nations Humanitarian Civil-Military Coordination
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNDAC	UN Disaster Assessment and Coordination system
UNDP	UN Development Programme
WCDRR	World Conference on Disaster Risk Reduction

1 Policy

The General Assembly, established in 1945 under the Charter of the United Nations, occupies a central position as the chief deliberative, policymaking and representative organ of the United Nations. It comprises all 192 Members of the UN and provides a forum for multilateral discussion of all international issues covered by the Charter. It also plays a significant role in the process of standard-setting and the codification of international law (See chapter 2). The Assembly meets in regular session intensively from September to December each year, and thereafter as required (UNISDR, 2013).

The Main Committees of the General Assembly deliberate the items, seeking to harmonize the various approaches of States. They then present their recommendations, generally in the form of draft resolutions and decisions, to a plenary meeting of the Assembly for its consideration. The six Main Committees are:

- Disarmament and International Security Committee
- Economic and Financial Committee
- Social, Humanitarian and Cultural Committee
- Special Political and Decolonization Committee
- Administrative and Budgetary Committee
- Legal Committee) (UNISDR 2013

The UN system is comprised of many offices and agencies, programmes and funds working throughout the world. Each organization has its own governing body, budget and secretariat. In the field of disaster and crisis management, the UN General Assembly itself does not have any operational role in conducting disaster management activities, but rather is responsible for launching many of the programmes, which are then carried out by the various UN offices and UN Member State governments. Each has been given a mandate to provide or coordinate international crisis management assistance within their respective field.

1.1 Risk Assessment

The UN define risk as “the probability of harmful consequences — casualties, damaged property, lost livelihoods, disrupted economic activity, and damage to the environment —resulting from interactions between natural or human-induced hazards and vulnerable conditions”, and risk assessment as a “process to determine the nature and extent of such risk, by analysing hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend” (UNDP 2010). Among the main UN bodies with a specific mandate pertaining to risk assessment are United Nations Development Programme (UNDP) and the UN Office for Disaster Risk Reduction (UNISDR).

Risk assessment is an important part of UNDP disaster risk reduction (DRR) projects and programmes. The main UNDP support services in the field of risk assessment are:

- **Capacity development.** UNDP provides guidance and technical assistance to governments for the establishment of disaster risk assessment and related institutional arrangements; assesses hazard monitoring and mapping capacities to support gap identification; supports local government to undertake risk assessments for determining areas of resettlement and recovery after a disaster.
- **Methodology and tool development⁶³.** UNDP has developed specific methodologies and tools to conduct multi-hazard risk assessment; guidance on impact assessment of climate change; support to its partners to assess existing capacities, identifying gaps, and assisting to help install mechanisms to address gaps.
- **National disaster observatory (NDO) development.** UNDP provides support for the development of NDOs. These are local institutions that systematically collect, compile and interpret historic disaster information and data.
- **Utilization of risk analysis for DRR planning.** UNDP supports governments to incorporate and apply risk assessments to disaster risk reduction strategies on all levels. UNDP also helps to standardise risk assessments as the basis for the design, funding and implementation of DRR/risk management projects. (UNDP 2010).

Figure 10 displays the UNDP's 7-step plan for comprehensive risk assessment.

⁶³ UNDP distinguishes between two levels of risk assessment: national and local. A national assessment is a strategic one that supports the design of national DRR strategies, policy and regulations, DRM programming and budget allocation. A local assessment is operational in nature, intended for DRR action planning, contingency planning, pre-disaster recovery planning, and proper urban planning.

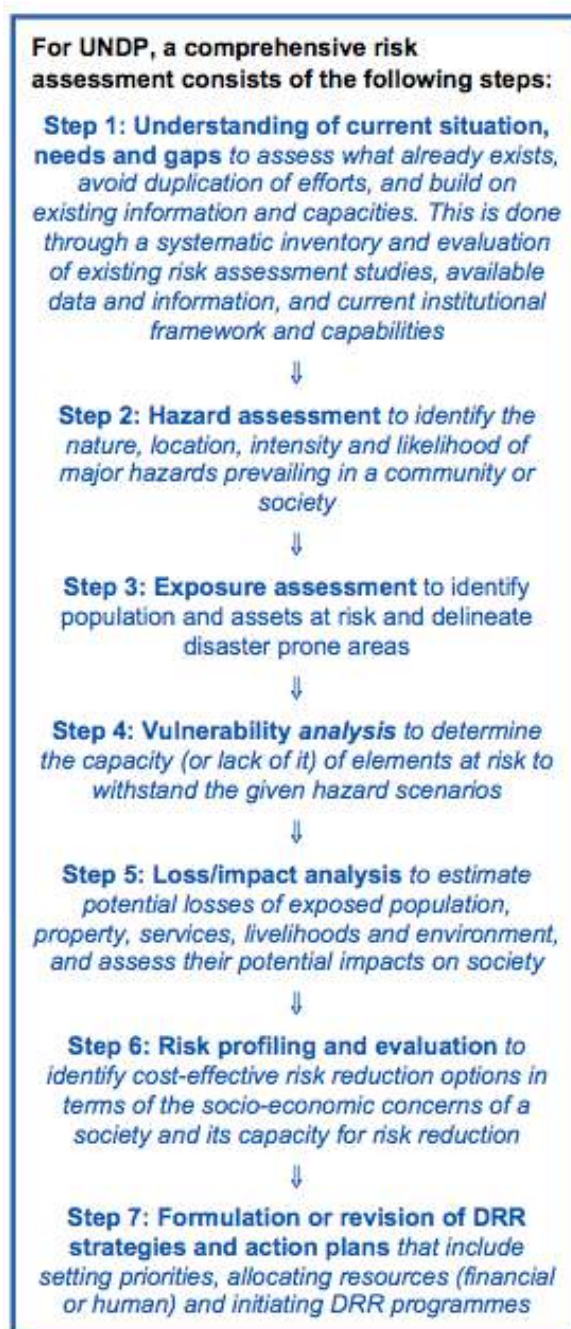


Figure 10: UNDP steps for comprehensive risk assessment⁶⁴

1.2 Policy and Governance

Through its many offices, agencies and programmes, the UN supports nations to reduce hazard vulnerability while building local institutional capacity, is among the first organisations to arrive when disaster strikes and, in the aftermath, it remains on the ground to assist recovery. Each has been given a mandate to provide or coordinate international crisis management assistance within their

⁶⁴ UNDP – Bureau for Crisis Prevention and Recovery (2010). “Disaster Risk Assessment,” *Thematic Briefs*, October 2010.

respective field. This report focuses on the three most prominent bodies that have mandates pertaining to crisis management and disaster risk reduction, namely the **UNISDR**, **UNDP** and **UN-OCHA**.

1.2.1 Strategy scope and focus

The strategic approach of the three main UN bodies to crisis management and disaster risk reduction covers all necessary activities for prevention (including resilience actions), preparedness, response (including mitigation) and recovery. Each of the three main bodies has its own strategic focus and operational mandate, which collectively provide the foundations for the overarching UN strategic approach to crisis management and disaster risk reduction. The main elements are summarised below:

UN Office for Disaster Risk Reduction (UNISDR)

UN Office for Disaster Risk Reduction (UNISDR) is the inter-agency secretariat that was established in December 1999 with the General Assembly Resolution 54/219 to ensure the implementation of the International Strategy for Disaster Reduction (ISDR), which was adopted with the same resolution (A/RES/54/219).⁶⁵ UNISDR is the office for disaster risk reduction (DRR)⁶⁶, while the ISDR is a strategic conceptual framework (UNISDR, 2013).

The ISDR, launched in 2000 by the Economic and Social Council and the General Assembly, is a strategic and conceptual framework, implemented by a system of partnerships⁶⁷, with the objective to foster and support a global DRR movement. It was established as an inter-agency framework and mechanism (inter-agency task force on disaster reduction and an inter-agency secretariat) to serve as a focal point within the United Nations system for promoting public awareness and commitment, expanding networks and partnerships, and improving knowledge about disaster causes and options for risk reduction. It builds on the Yokohama Strategy and Plan of Action and as follow-up to the International Decade for Natural Disaster Reduction (UNISDR, 2005).

It is underpinned by the *Sendai Framework for Disaster Risk Reduction 2015-2030* (Sendai Framework), which is the overall framework for implementing international DRR endorsed by the UN General Assembly (A/RES/69/283) following the 2015 Third UN World Conference on Disaster Risk Reduction (WCDRR) in Sendai, Japan on 18 March 2015. The Sendai Framework is the successor

⁶⁵ UNISDR is the successor arrangement to the International Decade for Natural Disaster Reduction (IDNDR). Information on the mandate of the ISDR can be found at: <http://www.unisdr.org/who-we-are/international-strategy-for-disaster-reduction>

⁶⁶ UNISDR defines DRR as “the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.” See UNISDR terminology on disaster risk reduction: <http://www.unisdr.org/we/inform/terminology>

⁶⁷ Partners include Governments, inter-governmental and non-governmental organisations, international financial institutions, scientific and technical bodies and specialized networks as well as civil society and the private sector.

instrument to the *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*. It comprises seven targets and four priorities for action aimed at the following outcome:

*The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.*⁶⁸

The seven global targets are as follows:

- (a) Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015.*
- (b) Substantially reduce the number of affected people globally by 2030, to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.*
- (c) Reduce direct disaster economic loss in relation to global GDP by 2030.*
- (d) Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.*
- (e) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.*
- (f) Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.*
- (g) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.*⁶⁹

The four priorities for action are:

- Priority 1. Understanding disaster risk
- Priority 2. Strengthening disaster risk governance to manage disaster risk
- Priority 3. Investing in disaster risk reduction for resilience
- Priority 4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction⁷⁰

The UNISDR is the focal point for the implementation of the Sendai Framework. Paragraph 48 (c) of the Sendai Framework calls upon “the United Nations Office for Disaster Risk Reduction (UNISDR), in particular, to support the implementation, follow-up and review of this framework through [...] generating evidence-based and practical guidance for implementation in close collaboration with States, and through mobilization of experts; reinforcing a culture of prevention in relevant stakeholders [...]”. A number of targeted Sendai Framework implementation guidelines to support the process are in development.

⁶⁸ UNISDR (2015a), Sendai Framework for Disaster Risk Reduction 2015-2030, Available http://www.preventionweb.net/files/43291_sendaimrameworkfordrren.pdf

⁶⁹ UNISDR (2015a), Sendai Framework, paragraph 18.

⁷⁰ Ibid.

United Nations Development Program (UNDP)

The UNDP is the UN's global development network, helping to build nations that are able to withstand crisis and deliver their own solutions to global and national development challenges. UNDP is active in 177 countries and territories around the world.

The UNDP Strategic Plan 2014-2017 includes key areas of work specifically related to disaster risk reduction and resilience-building (see section 1.5). These actions fall under the Area of Work 3 entitled "Resilience-building". The Strategic Plan states that all areas of work proposed in the Plan "will help build resilience whether, for instance, through greater employment and livelihoods, more equitable access to resources, better protection against economic and environmental shocks, peaceful settlement of disputes or progress towards democratic governance" (UNDP, 2013a). Under the "resilience-building" theme, UNDP's work will focus on two additional issues: "rapid and effective recovery from conflict-induced crises in those cases where prevention has fallen short; and a much stronger ability to prepare for and deal with the consequences of natural disasters, especially as they are exacerbated by climate change" (Ibid).



Figure 11: DRR Focus of UNDP⁷¹

⁷¹ UNDP, "Changing with the World - UNDP Strategic Plan: 2014-2017," New York: UNDP, 2013. Accessed 30 October 2014.

The Plan appears to address both pre- and post-disaster work, which states,

A major focus will be on what happens before disasters strike. This will include support across a range of issues: disaster risk assessment looking, for example, at geophysical, weather/climatic and other hazards, including those that are low intensity but high frequency, as well as differentiated vulnerabilities by social and economic groups such as women, female-headed households and populations located in the poorest regions; policies and long-term planning and investment frameworks that are disaster risk-sensitive, integrate disaster risk reduction with adaptation to climate change and address differentiated social and economic impacts; and preparedness for disaster management and recovery at the sub-national and national levels, including innovation to manage risks through insurance and resilient infrastructure.

The other major focus will be on what happens after disasters strike. This will address post-disaster planning for recovery and preparation of recovery and reconstruction plans and programmes that are inclusive of and accountable to displaced populations, women and other excluded groups. This will be reinforced through assistance for better coordination and implementation of early recovery programmes with a focus on local economic conditions[...]⁷²

Office for Coordination of Humanitarian Affairs (OCHA)

The Office for Coordination of Humanitarian Affairs (OCHA), in collaboration with the Inter-Agency Standing Committee (IASC), is the arm of the UN responsible for bringing together national and international humanitarian actors in the event of an emergency or crisis, to ensure a coherent response.

Through the cluster system (section 3.1.3), OCHA appears to cover all phases of the crisis management cycle. Although OCHA's primary strategic focus is on coordinating emergency response, the agency is also engaged in risk-reduction (section 1.2.4). OCHA sees emergency preparedness and DRR as critical to building community and household resilience (UNISDR, 2013). UN-OCHA defines preparedness as,

Emergency preparedness is the knowledge and capacity developed by governments, recovery organizations, communities and individuals to anticipate, respond to and recover from the impact of potential, imminent or current hazard events, or emergency situations that call for a humanitarian response.

Emergency preparedness requires long-term, comprehensive engagement in the framework of disaster risk reduction (DRR). DRR activities include strengthening early warning and preparedness, and mobilizing and coordinating international disaster assistance. Priority Five of the Hyogo Framework for Action highlights the essential role of disaster preparedness in saving lives and livelihoods, particularly when integrated into an overall DRR approach.⁷³

⁷² UNDP, "Strategic Plan: 2014-2017," p. 36-37.

⁷³ UN-OCHA, "Preparedness," accessed 18 November 2014, <http://www.unocha.org/what-we-do/coordination/preparedness/overview>.

1.2.2 Monitoring and analytical support to policy making; R&D

Two UNSIDR programmes identified contribute to monitoring and analytical support to policy making and R&D activities. These are:

The **programme on Risk Informed Public Policy and Investment**, which assist governments and stakeholders worldwide to:

- systematically account for disaster losses;
- develop profiles of both intensive¹ and extensive² risk at the national level;
- explore the rationale for risk-informed public policy-making and investment; and
- support the enabling environment for wider engagement of local governments.

This programme also contributes to a strengthened global evidence base on disaster losses, and progress on DRR through the publication of the 2015 Global Assessment Report (UNISDR, 2015b).

The UNSIDR **Scientific and Technical Advisory Group (STAG)**, which undertakes scientific and technical research with the purpose to provide technical advice and support in the formulation and implementation of activities carried out by the DRR community. STAG's 2013 report "Using science for disaster risk reduction" includes case studies which provide specific examples of scientific learning employed and applied to enhance DRR policy making.⁷⁴

1.2.3 Policy for Prevention

UN General Assembly Resolution 46/182 (1991) sets out the following policy for prevention:

The international community should adequately assist developing countries in strengthening their capacity in disaster prevention and mitigation, both at the national and regional levels, for example, in establishing and enhancing integrated programmes in this regard.

In order to reduce the impact of disasters there should be increased awareness of the need for establishing disaster mitigation strategies, particularly in disaster-prone countries. There should be greater exchange and dissemination of existing and new technical information related to the assessment, prediction and mitigation of disasters. As called for in the International Decade for Natural Disaster Reduction, efforts should be intensified to develop measures for prevention and mitigation of natural disasters and similar emergencies through programmes of technical assistance and modalities for favourable access to, and transfer of, relevant technology.

⁷⁴ UNISDR, "Science and Technology Research Institutions, Organizations and Networks," accessed 19 November 2015 <http://www.unisdr.org/partners/academia-research>.
<http://www.unisdr.org/partners/academia-research>.

Organizations of the United Nations system involved in the funding and the provision of assistance relevant to the prevention of emergencies should be provided with sufficient and readily available resources.⁷⁵

The UNISDR serves as the focal point within the UN System for coordinating and supporting implementation of disaster risk reduction policy and activities, while UNDP has the responsibility of the Emergency Relief Coordinator (ERC)⁷⁶ regarding operational activities for natural disaster mitigation, prevention and preparedness. (See section 1.2.1).

The UN policy for prevention and mitigation is promoted through development projects implemented with the assistance of governments, organisations and citizens and with the objective of ensuring that appropriate disaster risk-reduction (and response) measures are included in development activities.

1.2.4 Policy for Preparedness

UN policy for preparedness, as outlined in General Assembly resolution 46/182, envisions a direct linkage between preparedness and economic growth and sustainable development. This is particularly the case in the context of disaster-prone developing countries where “emergencies reflect the underlying crisis in development facing developing countries.” (Annex, Part 1, para. 10). The resolution states:

International relief assistance should supplement national efforts to improve the capacities of developing countries to mitigate the effects of natural disasters expeditiously and effectively and to cope efficiently with all emergencies. The United Nations should enhance its efforts to assist developing countries to strengthen their capacity to respond to disasters, at the national and regional levels, as appropriate.⁷⁷

As with its policy for prevention, the UN policy for preparedness is promoted through development projects that aim to boost local and regional preparedness capacity, e.g., through the development of early warning systems and monitoring and forecasting routines. Specifically,

⁷⁵ General Assembly resolution A/RES/46/182: “Strengthening of the coordination of humanitarian emergency assistance of the United Nations,” Annex, part II: 13-14, 16, 19 December 1991.

⁷⁶ General Assembly Resolution 46/182 established the position of the Emergency Relief Coordinator, providing it with nine clear areas of responsibility. Among them are: coordinating humanitarian assistance, facilitating access to emergency areas, organizing needs-assessment missions, preparing joint appeals and mobilizing resources. The UN transferred to the UNDP these responsibilities under the General Assembly Resolution 52/12 (1997).

⁷⁷ A/RES/46/182, Annex, part III, para. 18-20, 1991.

On the basis of existing mandates and drawing upon monitoring arrangements available within the system, the United Nations should intensify efforts, building upon the existing capacities of relevant organizations and entities of the United Nations, for the systematic pooling, analysis and dissemination of early-warning information on natural disasters and other emergencies. In this context, the United Nations should consider making use as appropriate of the early-warning capacities of Governments and intergovernmental and non-governmental organizations.

*Early-warning information should be made available in an unrestricted and timely manner to all interested Governments and concerned authorities [...]*⁷⁸

UNISDR and UNDP are the two central entities responsible for UN policy on preparedness. UNISDR has the mandate to coordinate international efforts on DRR while UNDP has the mandate to undertake operational activities for disaster mitigation, prevention and preparedness. UNDP carries out its work, together with partner agencies such as OCHA, to support nationally and locally driven initiatives under the auspices of the Hyogo Framework for Action, which aims to substantially reduce disaster losses by 2015.

UNDP policy for preparedness has 4 central components:

- **Preparing Governments.** UNDP works with governments to build capacity and ensure that laws, policies and institutions capable of assessing disaster risk and evolving early warning systems are developed.
- **Preparing Communities.** UNDP helps to raise awareness and develop the skills necessary for effectively responding to threats.
- **Preparing the UN.** Inter-Agency Contingency Plans, which allow for coordination and financial resource planning, are developed in order to prepare the UN system for disasters. The plans are directed by OCHA and bring together experts who prepare hypothetical disaster profiles and conduct training exercises. UNDP maintains a database of skilled experts available for deployment to disaster zones on short notice in order to ensure rapid response to a catastrophe (Issue Brief, Disaster Preparedness, 2013).
- **Partnerships for Preparedness.** UNDP, the World Bank, the EC and the local Government partner to undertake comprehensive post disaster needs assessments in the immediate aftermath of a disaster. These assessments enable a better understanding of the extent of damage and loss and are the first step in designing a response to inform subsequent activities (UNDP, 2013b).

OCHA is also involved in pre-crisis preparedness. As the coordinator of international response operations, OCHA's preparedness activities primarily aim to create favourable conditions for a successful emergency response in the event of a crisis. Specifically, OCHA's emergency preparedness responsibilities aim to strengthen the following areas: (1) OCHA's internal response capabilities; (2) the capability of the in-country members [of the humanitarian coordination system] to make a

⁷⁸ Ibid.

coordinated emergency response, and; (3) the capacity of local, regional and national authorities/organisations to request and/or mobilise international humanitarian assistance and to effectively work with the in-country humanitarian coordination system (UNISDR, 2013).

1.2.5 Policy for Response

UN General Assembly resolution 46/182 outlines several contingency funding arrangements (see section 1.3.2) and additional measures for rapid response in relation to UN policy for response. Concerning the additional measures, the following are outlined:

The United Nations should, building upon the existing capacities of relevant organizations, establish a central register of all specialized personnel and teams of technical specialists, as well as relief supplies, equipment and services available within the United Nations system and from Governments and intergovernmental and non-governmental organizations that can be called upon at short notice by the United Nations.

The United Nations should continue to make appropriate arrangements with interested Governments and intergovernmental and non-governmental organizations to enable it to have more expeditious access, when necessary, to their emergency relief capacities, including food reserves, emergency stockpiles and personnel, as well as logistic support. In the context of the annual report to the General Assembly mentioned in paragraph 35 (i) below, the Secretary-General is requested to report on progress in this regard.

Special emergency rules and procedures should be developed by the United Nations to enable all organizations to disburse quickly emergency funds, and to procure emergency supplies and equipment, as well as to recruit emergency staff.⁷⁹

The lead body responsible for coordinating response operations in the event of a crisis is UN-OCHA. As stated in the ACRIMAS report (2011),

When crises and catastrophes strike outside the EU, the UN (namely the UN Office for the Coordination of Humanitarian Affairs, OCHA), has got the overall responsibility to coordinate all humanitarian assistance to a stricken country. This is a provision that is highly acknowledged within the EU, among the Commission and most of the Member States.⁸⁰

The OCHA Emergency Relief Coordinator (ERC) heads the UN response to emergency situations when disaster strikes. The ERC works with a committee of a number of UN agencies and associated bodies depending on the problems specific to the event. These may include UNICEF, UNDP, UNHCR, WFP and so on.

⁷⁹ A/RES/46/182, Annex, part IV para. 27-29, 1991.

⁸⁰ Hans-Martin Pastuszka, 2008, "Report on Current CM Framework," Aftermath CM System-of-systems Demonstration (FP7 ACRIMAS project, January 2011), 30-31.

The key players during the search-and-rescue (SAR) phase are the international urban SAR teams that comprise the **International Search and Rescue Advisory Group (INSARAG)**. This network of countries and organisations is chaired by OCHA Geneva's Emergency Services Branch (ESB).

1.2.6 Policy for Relief and Recovery

UN General Assembly resolution 46/182 outlines the following with regards to UN policy for relief and recovery:

Emergency assistance must be provided in ways that will be supportive of recovery and long-term development. Development assistance organizations of the United Nations system should be involved at an early stage and should collaborate closely with those responsible for emergency relief and recovery, within their existing mandates.

*International cooperation and support for rehabilitation and reconstruction should continue with sustained intensity after the initial relief stage. The rehabilitation phase should be used as an opportunity to restructure and improve facilities and services destroyed by emergencies in order to enable them to withstand the impact of future emergencies.*⁸¹

UNDP is the lead agency on early recovery and has inherited responsibilities from the Inter-Agency Standing Committee (IASC), the body responsible for inter-agency cooperation in the humanitarian system. UNDP hosts the Cluster Working Group on Early Recovery (CWGER). The Recovery Unit of UNDP (under BCPR) operates when the response or relief phases of the disaster has ended, but recovery has yet to fully commence. The Early Recovery approach⁸² as set out in a UNDP policy paper comprises "a set of specific programmatic actions to help people move from humanitarian relief towards self-sustaining development" (UNDP, 2012). The roles of the CWGER include the promotion and clarification of early recovery as a concept, and to ensure that it is adopted in within the context of humanitarian responses in the event of a disaster/emergency or crisis. As outlined in the policy paper (2012), the CWGER's action focuses on four main strands of action:

Providing direct strategic and coordination support to Humanitarian Coordinators (HCs), Resident Coordinators (RCs), Deputy Special Representatives of the Secretary-General, Humanitarian Country Teams (HCTs) and Cluster Lead Agencies at the country level; (ii) Defining and coordinating early recovery work that is not covered by other clusters (e.g. governance, non-agricultural livelihoods); (iii) Providing initiative and guidance on the integration of early recovery in the work of other clusters, and inter-cluster coordination of early recovery; and (iv) Influencing the global policy agenda on humanitarian financing, civilian

⁸¹ A/RES/46/182, Annex, part VII para. 40-41, 1991.

⁸² "Early" refers to the fact that the need to look beyond relief is immediate; 'Recovery' refers to the aim to ensure a more resilient people than before the crisis and because of the actions to prepare the ground for longer-term recovery and development.

capacities, and strategic planning to strengthen the potential for, and impact of early recovery within international crisis response and recovery efforts.⁸³

At the country level,

UNDP helps HC/RCs and the HCT to integrate early recovery approaches into the humanitarian response through the deployment of Early Recovery Advisors (ERAs). ERAs work across the humanitarian community, and help develop common strategies to strengthen the links between relief, recovery and development – including in needs assessments, appeals and the work of all clusters. UNDP’s Bureau for Crisis Prevention and Recovery (BCPR) maintains an inter-agency roster for quick ERA deployment on behalf of the CWGER.⁸⁴

UNDP also acts as an implementing agency. In the wake of a natural disaster (e.g., earthquake, flood, etc.), UNDP works with its partners to ensure public services re-commence functioning as early as possible after the event; train those affected with relevant skills, such as construction techniques, as well as train local public servants to ensure that reconstructed infrastructure meets a minimum code of disaster resistance. Underlying causes are addressed and better crisis observation and early warning systems are erected. This work typically includes: emergency employment to restart the local economy, rehabilitation of community infrastructure; debris management and local governance support.

1.3 Financing

1.3.1 Investing in preparedness

Financing for disaster preparedness and response is provided through a number of instruments. These include the UN Trust Fund for Disaster Risk Reduction and several pooled funds managed by OCHA.

The UNISDR is almost entirely funded from extra-budgetary support. The only support provided through the UN regular budget is one D1 staff to coordinate the UNISDR’s regional programme activities. The post was first approved for the 2012-2013 biennium and subsequently confirmed for the 2014-2015 biennium (UNISDR 2015b). UNISDR provides its funding through the **Trust Fund for Disaster Reduction**, which relies entirely on voluntary contributions, with the majority of its resources being earmarked by donors. According to figures reported in its *Annual Report for 2014*, UNISDR raised US\$ 37.7 million in 2014 (i.e. 90% of the US\$41.7 million target for the year and 47% of the biennium target of US\$80 million). The report further states that “Un-earmarked funding of over US\$1 million each from Finland, the Netherlands, Sweden and Switzerland was invaluable. The

⁸³ UNDP (2012), “UNDP and Early Recovery,” Geneva: UNDP-BCPR, November 2012. Accessed 8 Nov. 2014. <http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/undp-in-early-recovery/>

⁸⁴ Ibid.

proportion of earmarked and un-earmarked funding received in 2014 was 69% and 31%, respectively” (UNISDR 2015b). Figure 12 shows the contributions received and pledged⁸⁵ for the biennium 2014-2015 as of 14 September 2015.

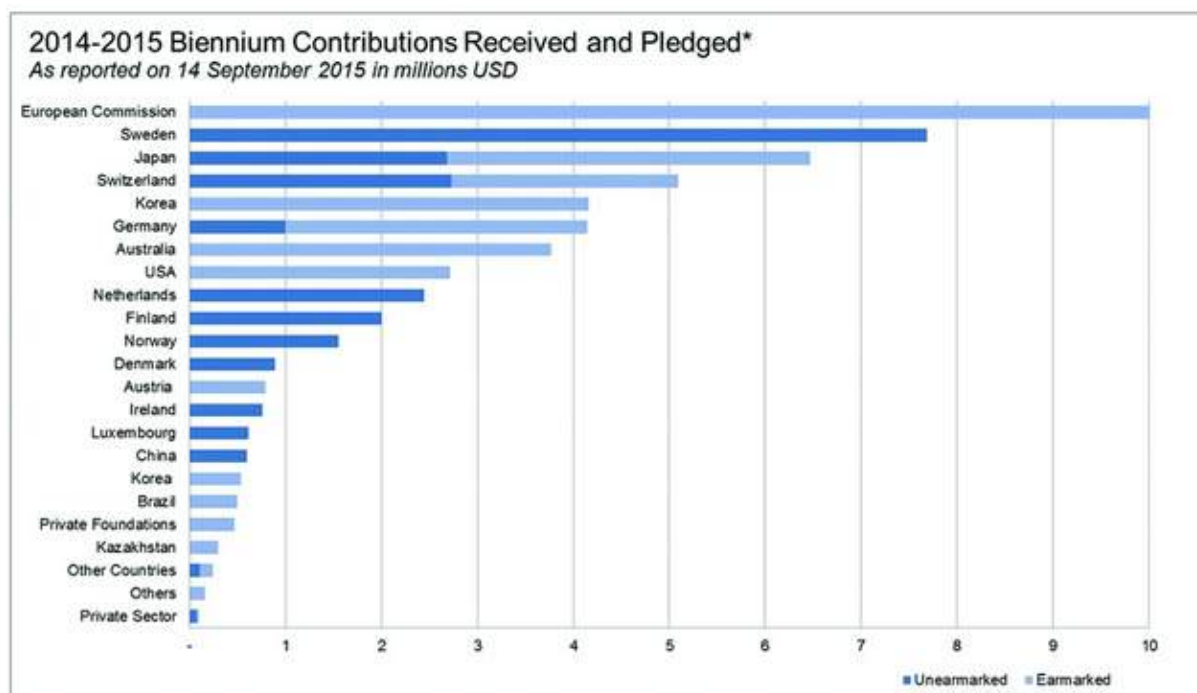


Figure 12: 2014 Contributions Received and Pledged⁸⁶

In terms of financing for disaster response, as the organization responsible for leading the coordination of response operations, OCHA plays an important role in financing the costs of response. OCHA is funded from the UN Regular Budget as well as from Member States’ voluntary contributions for its ability to deliver on its UN General Assembly mandate.⁸⁷

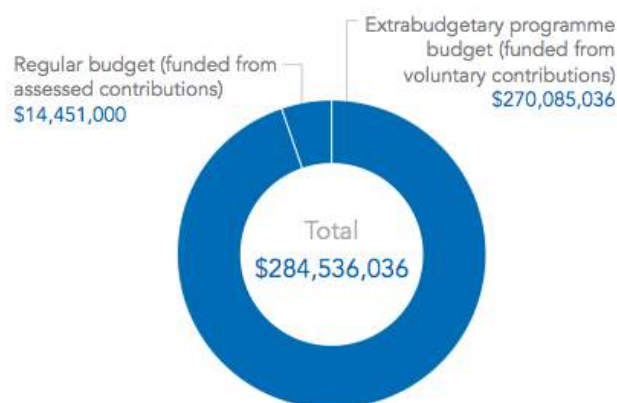
OCHA’s plans and budget for 2014 and 2015 are based on its 2014-2017 Strategic Plan, with delivery against the plan budgeted at \$331.8 million in 2014 and \$321.7 million in 2015 (up from \$285.4 million in 2012), including an appropriation of 0.4 per cent from the global UN regular budget to cover \$14.5 million in programme requirements. Seventy – three per cent of OCHA’s budget covers staff costs of its 2,154 national and international staff located around the world (see 5.1).

⁸⁵ A pledge is a non-binding announcement of an intended contribution or allocation by a donor. Data for total pledged contributions not yet realized are unavailable at the time of writing.

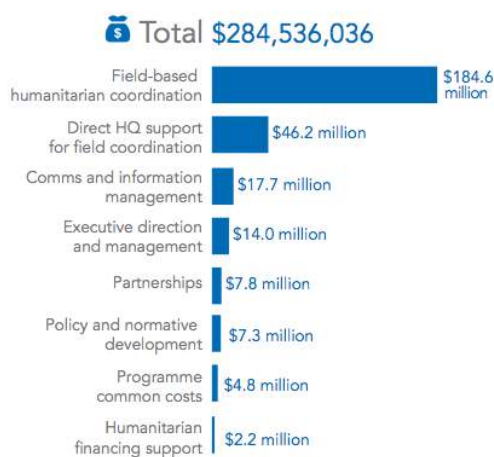
⁸⁶ UNISDR website, “Donor Partnerships”, accessed 19 November 2015 <http://www.unisdr.org/who-we-are/donors>

⁸⁷ The UN General Assembly approves the Regular Budget every two years. The Regular Budget is funded from assessed contributions paid by each Member State on the basis of a formula that takes into account each Member States’ relative GDP. However, because regular budget allocations have remained rather static in recent years, it has had to increasingly rely on extra-budgetary resources.

2014 Budget by source of funding

Figure 13: UN-OCHA Budget by source of funding⁸⁸

2014 Programme budget by activity



2014 Administrative budget by activity



2014 Budget Summary: Headquarters' Regular & Extrabudgetary Programme Budget

2014 Budget Summary (Headquarters)	Regular Budget		Extrabudgetary Programme Budget (Funded from voluntary contributions)		Total Programme Budget	
	Budget	Posts	Budget	Posts	Budget	Posts
Executive Management	2,011,600	7	6,895,195	29	8,906,795	36
Corporate Programmes Division	4,433,000	23	31,077,418	113	35,510,418	136
Office of the Director, New York	-	2	6,288,225	22	6,288,225	24
Administrative Services Branch	2,142,900	7	2,687,557	-	4,830,457	7
Policy Development and Studies Branch	774,100	4	6,542,727	26	7,316,827	30
Communications Services Branch	517,400	3	6,239,029	31	6,756,429	34
Information Services Branch	998,600	7	9,319,880	34	10,318,480	41
Coordination and Response Division	3,809,200	20	16,846,998	74	20,656,198	94
Geneva Office	4,197,200	21	30,705,807	117	34,903,007	138
Office of the Director, Geneva	453,300	2	2,585,760	11	3,039,060	13
Emergency Services Branch	1,903,500	10	13,165,698	46	15,069,198	56
Partnerships & Resource Mobilization Branch	1,840,400	9	5,935,261	23	7,775,661	32
Programme Support Branch	-	-	9,019,088	37	9,019,088	37
Total Headquarters Requirements	14,451,000	71	85,525,418	333	99,976,418	404

⁸⁸ OCHA in 2014 & 2015: Plan and Budget.

Figure 14: UN-OCHA 2014 Budget Summary⁸⁹

1.3.2 Investing in consequence management

Both UN-OCHA and UNDP play an important role in the management of financing for consequence management.

In the event of a disaster or crisis, the UN can immediately provide assistance through the use of pooled funds managed by OCHA. There are two types of pooled funds: the **Central Emergency Response Fund (CERF)** and **Country-based Pooled Funds (CBPFs)**. The major distinction between these funds is that the CERF covers all countries, whereas the CBPFs respond only to specific humanitarian situations in 17 countries. For the latter, funds are allocated directly to international and national NGOs for the implementation of projects, whereas NGOs do not have access to CERF funds directly (UN-OCHA, Humanitarian Financing). The CERF is funded through voluntary contributions from across 125 UN Member States and the private sector, and administered by the ERC. Voluntary contributions to CERF amounted to US \$270.1 million in 2014 and an estimated US \$262.3 in 2015 (up from \$234.4 million in 2012).

In the immediate aftermath of a disaster, it is the Resident or Humanitarian Coordinator (RC/HC) that can make an application for CERF funds in order to cover priority projects from UN agencies. Funds are released immediately if the requests meet CERF's criteria, i.e. needs are urgent and the activities funded will save lives.⁹⁰

The **UNDP Crisis Prevention and Recovery Thematic Trust Fund (CPR TTF)** is a flexible funding mechanism allowing UNDP to address both crisis prevention and recovery needs. It is designed for quick action following a natural disaster as well as for reducing disaster risk. Since 2000, the fund has mobilized more than USD\$ 1 billion from across 100 countries. It is managed by the UNDP's Bureau for Crisis Prevention and Recovery (BCPR), responsible for both its fiduciary oversight and programmatic results. The CPR TTF accepts unearmarked as well as earmarked contributions that either benefit individual programme countries or target one of its priority outcome areas (conflict, disaster, early recovery and gender equality)

UNDP interventions carried out on the bankroll of this fund support a range of crisis prevention and recovery interventions, including conflict prevention, disaster risk reduction and a variety of post-crisis/post-conflict recovery and transition objectives.⁹¹

⁸⁹ UN-OCHA, "OCHA in 2014 & 2015: Plan and Budget – Financial Plan".

⁹⁰ UNOCHA website, "CERF", <http://www.unocha.org/cerf/>.

⁹¹ UNDP website, "Crisis Prevention and Recovery Thematic Trust Fund" Accessed 18 November. More information, including Annual Reports of the Trust Fund is available here: http://www.undp.org/content/undp/en/home/ourwork/crisispreventionandrecovery/crisis_preventionandrecverythematictrustfund/.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The IASC Guidance note on Early Recovery outlines the importance of post-disaster assessment for both lessons learning exercises as well as for policy-making. It states,

All clusters should conduct retrospective reviews when coordination mechanisms wind down and handover begins. Lesson learning exercises and After-Action Reviews are tools that can provide useful guidance and results with little effort. They are useful tools for quickly changing environments and emergencies and can be built into either the programmatic or the early recovery coordination cycle and be conducted at all levels (community, district, national, network etc.). Documenting and discussing ‘what went well’ and ‘what did not go well’ will inform decision-makers and future early recovery operations. Outcome evaluations are usually carried out mid-term or after a programme ends. Given the relatively short time-frame of early recovery programmes, rapid approaches to outcome evaluation are recommended, such as ex-post comparisons of target groups, after action reviews, lesson learned exercises, or real-time evaluations (RTEs). A real-time evaluation feeds back its findings for immediate use while the programme or portfolio of programmes is still being implemented. It should be carried out in the early stages of a response, and ideally, though not necessarily, be repeated during the project cycle. The approach emphasizes participation by agency staff, and the reporting method makes accessibility of results across agencies a priority, particularly rapid discussion of results with the implementing staff. Hence findings and recommendations are delivered briefly in verbal and written form, typically before leaving the field, and final reports are kept short.⁹²

As the lead agency responsible for response operations, post-disaster assessment is central to OCHA’s ability to deliver an effective and effectual response. The OCHA Policy Brief on “Slow-onset emergencies” (2011) indicates that:

The evaluation of the impact of early response mechanisms, should support monitoring and evaluation of early response initiatives so there is some clear proof that they work. By adopting an evidence-based approach, the case for early response rather than late response will gain credibility...In order to secure stable and sufficient funding for early response (or any other disaster risk reduction activity) rigorous impact assessment must be carried out. Links with research and academic institutions in the design of appropriate early response activities can help ensure monitoring and evaluation is included.⁹³

OCHA conducts evaluations to promote transparency, accountability and learning through systematic and objective judgments about the relevance, efficiency, effectiveness and impact of humanitarian interventions. Internal evaluations are typically undertaken at the request of the ERC and assess OCHA’s internal performance. OCHA may also undertake reviews that analyse specific tasks or

⁹² IASC, “IASC Guidance Note on Early Recovery,” 2008, p. 35.

⁹³ OCHA Policy Brief (No. 6) “OCHA and slow-onset emergencies”, 2011.

themes covered by work plan activities. Reviews are undertaken by external consultants and generally use similar methods as evaluations.

1.4.2 Departmental Lessons Learned systems

Organisational learning is an important part of OCHA's strategy. Lessons-Learned Reviews take the form of participatory exercises led by a facilitator with the aim to help the organization and partners learn from experience, and to incorporate these lessons into future activities, programming and institutional memory. Such exercises are carried out once an emergency situation has stabilized and involve the parties taking part in the emergency operation, including agencies, donors, NGOs, Governments, representatives of the affected population.

In 2012, OCHA launched the OCHA Organizational Learning Strategy (OLS), laying out "a multi-year plan to draw from lessons from evaluations, audits and performance reporting, and to develop the capacities of OCHA staff to perform their jobs better." The OLS also establishes enhanced learning architecture that takes advantage of learning opportunities from within and outside the organization.

1.4.3 Centralised (national) Lessons Learned system

Not applicable to the UN.

1.4.4 International exchange for Lessons Learned

International activities pertaining to the sharing of experiences and lessons learned are central to the HFA framework,

Stimulate the exchange, compilation, analysis, summary and dissemination of best practices, lessons learned, available technologies and programmes, to support disaster risk reduction in its capacity as an international information clearinghouse; maintain a global information platform on disaster risk reduction and a web-based register "portfolio" of disaster risk reduction programmes and initiatives implemented by States and through regional and international partnerships;⁹⁴

Provide for and support, through bilateral and multilateral channels, the implementation of this Framework for Action in disaster-prone developing countries, including through financial and technical assistance, addressing debt sustainability, technology transfer on mutually agreed terms, and public-private partnerships, and encourage North-South and South-South cooperation.⁹⁵

⁹⁴ To serve as a tool for sharing experience and methodologies on disaster reduction efforts. States and relevant organizations are invited to actively contribute to the knowledge-building process by registering their own effort on a voluntary basis in consideration of the global progress of the Conference outcomes.

⁹⁵ HFA, 2005, 18.

Within the framework of the UNDP-EU partnership, in 2008 the EU, the World Bank and the UNDP signed a joint declaration committing to collaborate and develop a common approach to post-crisis needs assessments and recovery planning. The joint declaration encompasses assessments needed after a disaster (PDNA) (as well as after a conflict – PCNA).⁹⁶

1.4.5 Regular policy reviews

Regular policy reviews are mandated by the UN for all of the agencies involved in crisis management, and have been built into the respective frameworks accordingly. The Secretary General undertakes a review of the Implementation of the ISDR on an annual basis.⁹⁷ Every two years multi-stakeholder reviews of HFA progress are presented at the UNISDR-coordinated Global Platform for Disaster Risk Reduction (GPDRR).⁹⁸

The UNDP Strategic Plan 2014-2017 (2013) indicates that continuous review and adjustment of strategy will be cornerstones to its approach and regular business plan monitoring. A Mid-Term Review of the Strategic Plan is planned for 2015-2016 and an independent evaluation of the Plan will be conducted by the Evaluation Office towards the end of the planning cycle. The latter will provide inputs into preparations for the Successor Plan.

OCHA undertakes reviews and evaluations as described in section 1.4.1.

1.5 Resilience

UNISDR, UNDP and OCHA all have as part of their strategic focus the building of resilience to disasters. General Assembly resolution 64/200 on International Strategy for Disaster Reduction (2010) acknowledged that “certain measures for DRR in the context of the HFA can also support adaptation to climate change, and emphasizing the importance of strengthening the resilience of nations and communities to natural disasters” (A/RES/64/200). The ISDR promotes global resilience to the effects of hazards and seeks to reduce losses resulting from disasters by:

- Increasing public awareness
- Obtaining commitment from public authorities
- Stimulating interdisciplinary and intersectoral partnership and expanding risk-reduction networking at all levels

⁹⁶ UNDP website, “UNDP-EU Partnership on reducing risks from disasters – Post Disaster Needs Assessment,” http://www.undp.org/content/brussels/en/home/partnerships_initiatives/results/EU-UNDP-PDNA.html.

⁹⁷ The reports are published on the UNISDR website, available: <http://www.unisdr.org/we/inform/resolutions-reports>.

⁹⁸ Links to the review reports can be found here: <http://www.preventionweb.net/english/hyogo/framework/?pid:47&pil:1>

- Enhancing scientific research on the causes and effects of natural disasters and natural hazards, respectively.⁹⁹

In its Strategic Plan, the UNDP defines resilience as,

*‘Resilience’ is an inherent as well acquired condition achieved by managing risks over time at individual, household, community and societal levels in ways that minimize costs, build capacity to manage and sustain development momentum, and maximize transformative potential. ‘Risks’ are factors of a magnitude and intensity able to both disrupt development progress and inflict significant direct and indirect costs.*¹⁰⁰

A major project in the field of resilience is the “Building Resilience to Disasters in the Western Balkans and Turkey” project, implemented jointly by UNISDR and WMO. Launched in May 2012, the project is supported by the European Commission DG Enlargement through the Instrument for Pre-Accession (IPA). The beneficiary countries are Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey (Gencer, 2014).

1.6 Information sharing and data protection

The UN agencies are committed to the sharing of data and information and principles of transparency. Regarding volunteers, the UN General Assembly resolution 46/182 states:

*The United Nations should, building upon the existing capacities of relevant organizations, establish a central register of all specialized personnel and teams of technical specialists, as well as relief supplies, equipment and services available within the United Nations system and from Governments and intergovernmental and non-governmental organizations that can be called upon at short notice by the United Nations.*¹⁰¹

UNDP, for example, maintains a database of skilled experts who can deploy at disaster zones on short notice.

Information sharing between UN-OCHA and the relevant EU bodies is formalised in the *Commission Decision of 27 October 2004 (2005/EC/160) approving the exchange of letters between the UNOCHA and the Commission of the European Communities concerning their cooperation in the framework of disaster response (in case of simultaneous interventions in a country affected by a disaster)*. The Annex to this Decision includes an agreement between the two parties to “ensure regular information exchanges” both in the preparedness phase and in the response phase to a disaster in which both parties are active. The exchange of information in the preparedness phase refers to, *inter alia*, including alert notification, policy and operational issues, as well as schedule meetings and workshops. In the response phase, this may include exchanging information on situation reports and

⁹⁹ UNISDR website, “ISDR – What is the International Strategy?”, <https://www.unisdr.org/who-we-are/international-strategy-for-disaster-reduction>.

¹⁰⁰ UNDP Strategic Plan: 2014-2017, 34.

¹⁰¹ A/RES/46/182, Annex, part IV, para. 27, 1991.

situation updates, identification of priority needs and resource requirements, planned and scheduled deployment of resources, resource mobilization (including support modules) to avoid overlap and duplication of efforts, details of the coordinators and assets which could be available (European Commission, 2005).

The UN considers social media tools as providing a wealth of new opportunities for communications, engagement and information sharing. New support systems are being set up, such as with OCHA Field Information Service (FIS) and partners to use these tools for information collection where appropriate. The UN teams up with volunteer communities to exploit online technologies and crowdsourcing methods in order to turn new sources of raw data into useful intelligence that can help aid response on the ground. It has teamed up with MapAction, Crisis Mappers and GISCorps to develop the Digital Humanitarian Network (DHNetwork). It is a network-of-networks that forms a consortium of Volunteer & Technical Communities (V&TCs), which then provide an interface between formal, professional humanitarian networks and informal volunteer & technical networks.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

Signed in San Francisco on 26 June 1945 at the conclusion of the United Nations Conference on International Organization, the Charter of the United Nations came into force on 24 October 1945. Concerning crisis (emergency, disaster) management, article 1.3 specifically states the objective to “achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character [...]” (T-1945, Art. 1.3). In service to these common ends, the UN is to be “a centre for harmonizing the actions of nations” (Ibid).

Under the Charter, each Government retains absolute authority within the borders of its own territory. Therefore the responsibility and authority to assist and meet the needs of a society in the event of a crisis (emergency, disaster) lies with the Government. As such, all international assistance is provided in support of national authorities and based upon request, irrespective of the desire of international organizations to respond immediately.

The UN General Assembly resolution 46/182, on “Strengthening of the coordination of humanitarian emergency assistance of the United Nations,” adopted on 19 December 1991, outlines an enhanced framework for international humanitarian assistance. The resolution set out 12 guiding principles for humanitarian relief, including from prevention and preparedness to rehabilitation and development (Hyogo Framework for Action 2005). The international community is guided by this resolution, 46/182, when it provides emergency assistance.

The resolution also outlines the responsibilities and authorities of the States as follows:

- Humanitarian assistance should be provided with the consent of the affected country and in accordance with the principles of humanity, neutrality and impartiality;
- Each State has the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory.
- States whose populations are in need of humanitarian assistance are called upon to facilitate the work of these organizations in implementing humanitarian assistance (A/46/182).

Each year, a number of humanitarian resolutions are negotiated by the Member States in the General Assembly, the Economic and Social Council and the Security Council. The new resolutions build on the GA resolution 46/182, further expanding the norms and guidance in support of humanitarian action.

2.2 General crisis (emergency, disaster) management law

In line with the Charter, no international organization has the authority to tell another organization what to do. The UN is not a world government and it does not make laws; rather it is an organisation of States that operates through consensus. It provides the means to formulate policies on matters with a global reach. As such, several United Nations agencies or bodies have been given a mandate to provide or coordinate assistance within their field of crisis management operation, but lack authority to command, direct or order. This privilege remains with State authorities only (OCHA, 2013).

As stated in the ACRIMAS report (2011),

*There are no legal provisions for disaster response in an international context beyond customary law. There are, however, non-binding guidelines and agreement that have been developed, for examples within the framework of the Inter-Agency Standing Committee (IASC), which are highly accepted among most of the humanitarian organisations. Humanity, neutrality, impartiality and independence are the leading principles for humanitarian assistance. Moreover, the so-called “humanitarian imperative” prevails, which means that humanitarian needs that occur in a country first shall be managed by the affected country. However, if the state or other institutions in the country are not able to manage the humanitarian situation, other countries and organisations have got a responsibility to provide support in accordance with international law.*¹⁰²

2.3 Emergency rule

Not applicable.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Not applicable.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Not applicable.

¹⁰² Hans-Martin Pastuszka, FP7 ACRIMAS project, 2011, 30-31. Accessed 18 November 2008.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

United Nations General Assembly resolution 56/38 of 10 January 2002 elaborates on ways for governments and civil society to support volunteerism and recommended that governments support volunteerism by creating a favourable environment, which includes “enabling fiscal, legislative and other frameworks”, and specifically within this category, to “introduce enabling legislation”.

Non-binding guidelines have been developed as part of the Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief (V-1994).

2.7 Legal regulations for international engagements of first responders and crisis managers

Rules for international engagements of first responders are outlined in General Assembly Resolution 46/182 as discussed in chapter 1.

3 Organisation

The United Nations System is comprised of the six principal organs of the United Nations, 15 agencies and a range of other programmes, bodies and Related Organizations. The 6 principal organs are:

1. the General Assembly,
2. the Security Council,
3. the Economic and Social Council,
4. the Trusteeship Council,
5. the International Court of Justice and
6. the Secretariat

The full system organisation chart is presented in Figure 15 below.

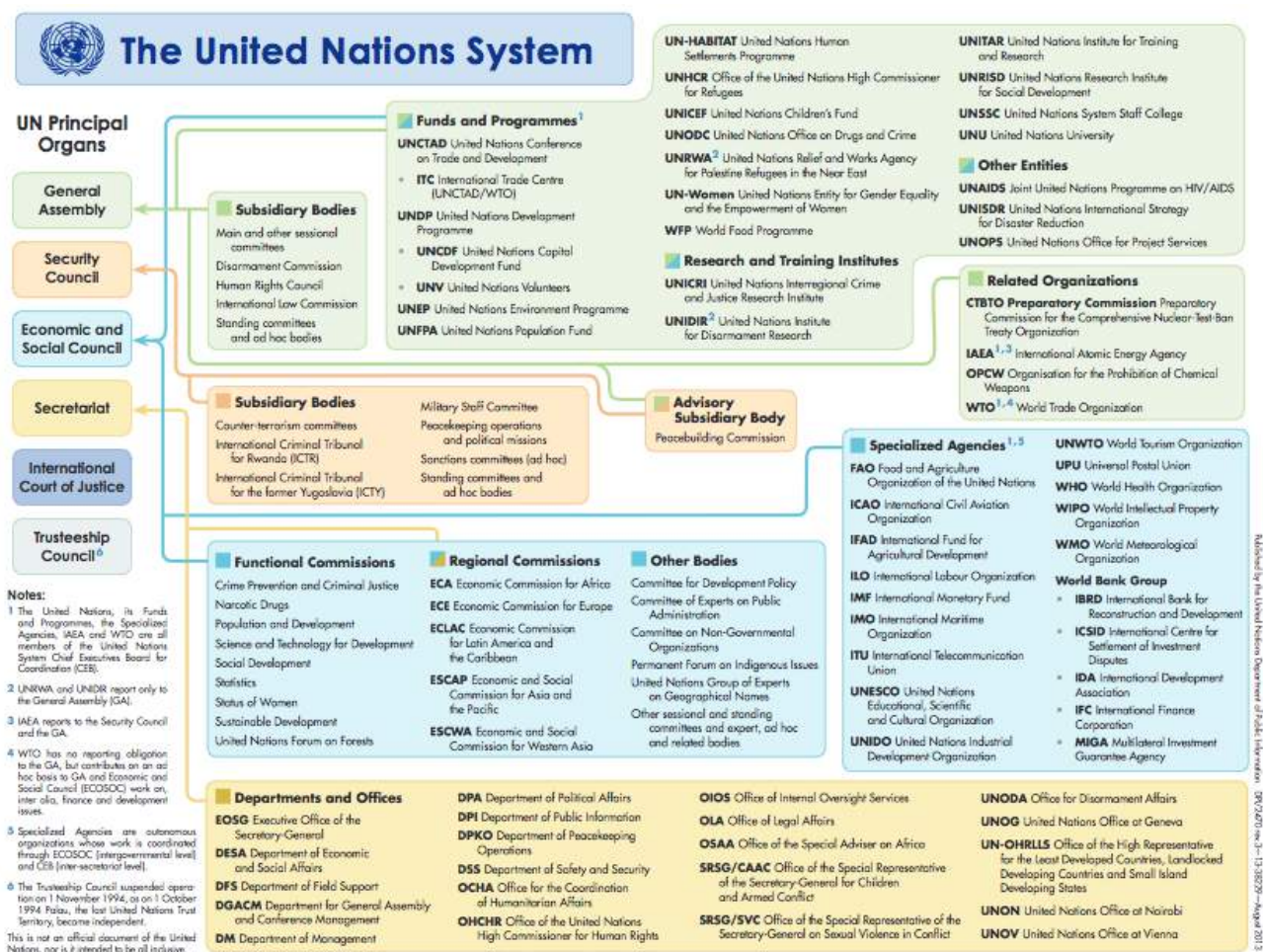


Figure 15: UN System Organisation Chart¹⁰³

¹⁰³ UN Website. For a full directory of the System and organisation charts, see www.un.org and www.unsceb.org (the website of the UN System Chief Executives Board for Coordination).

3.1 Organisational chart

Through its many offices, agencies and programmes, the UN supports nations to reduce hazard vulnerability while building local institutional capacity. In the field of disaster and crisis management, the UN General Assembly itself does not have any operational role in conducting disaster management activities, but rather is responsible for launching many of the programmes, which are then carried out by the various UN offices and UN Member States governments. Each has been given a mandate to provide or coordinate international crisis management assistance within their respective field. The three most prominent bodies that have mandates pertaining to crisis management and disaster risk reduction, namely the UNISDR, UNDP and OCHA.

3.1.1 UNISDR

UNISDR is the inter-agency secretariat responsible for the implementation of the International Strategy for Disaster Reduction (ISDR). UNISDR is the office for DRR, while the ISDR is a strategic conceptual framework (section 1.2.1). In December 2001, General Assembly resolution A/RES/56/195 specified that the mandate of UNISDR is “to serve as the focal point in the United Nations system for the coordination of disaster reduction and to ensure synergies among the disaster-reduction activities of the United Nations system and regional organizations and activities in socio-economic and humanitarian fields.” The UNISDR is also the focal point for the implementation of the Sendai Framework and for the organization of the Global Platform for Disaster Risk Reduction (UN General Assembly Resolution 61/198), under the leadership of the **Special Representative of the Secretary-General (SRSG)**.

UNISDR areas of work:

UNISDR **coordinates** international efforts on DRR. Its vision, based on the strategic goals of the HFA, is to integrate DRR into sustainable development policies and planning; develop and strengthen institutions, mechanisms and capacities to build resilience to hazards; and incorporate risk reduction approaches into emergency preparedness, response, and recovery programmes. UNISDR is charged with the preparation and follow-up of the biennial Global Platform for Disaster Risk Reduction that was first established in 2006 by GA resolution 61/198. The Platform is the main global forum for disaster risk reduction, providing strategic and coherent guidance for the implementation of the Hyogo Framework. UNISDR **advocates** for greater investment in DRR and for the integration of DRR into policies and programmes for climate change adaptation. UNISDR **campaigns** to increase awareness of DRR benefits and to empower individuals reduce their own vulnerability. On-going campaigns focus on safer schools and hospitals, as well as resilient cities. Finally, UNISDR **informs** and connects people by providing tools such as the risk reduction website, PreventionWeb, publications on good practices, country profiles and the Global Assessment Report on DRR. The latter is an authoritative analysis of global disaster risks and trends (UNISDR, 2012).

Headquartered in Geneva, the UNISDR implements its mandate through five regional offices. The offices are based in Asia (Bangkok), Africa (Nairobi), Europe (Brussels), Arab States (Cairo) and Latin America and the Caribbean (Panama). It also maintains a UN HQ liaison office in New York, a liaison

office in Bonn and presences in Kobe, (Japan), Suva, (Fiji), Incheon, (Republic of Korea), Almaty, (Kazakhstan) and Rio (Brazil) (UNISDR 2013).

Regional platforms are intended to serve as a forum for exchanging information and knowledge, and coordinating efforts in crisis management. In Europe, this is carried out through the European Forum for Disaster Risk Reduction (EFDRR). It provides advocacy for effective action to reduce disasters while focusing on contemporary issues of importance needed to promote a good political climate for implementation of the Hyogo Framework for Action.

3.1.2 UNDP

The UNDP is the UN's global development network and is active in 177 countries and territories around the world. Through its country offices, UNDP supports disaster prone countries in the development of comprehensive DRR programmes. In 1998, the UN transferred to the UNDP "the responsibilities of the **Emergency Relief Coordinator** for operational activities for natural disaster mitigation, prevention and preparedness" (A/RES/52/12B, para 16). With this decision, UNDP assumed operational responsibility for natural disaster mitigation, prevention and preparedness.

UNDP is involved in supporting countries with high levels of disaster risk to develop their DRM capacity at national and local levels. A large part of this has been dedicated to strengthening governance arrangements for DRR, including legislative frameworks and institutional systems and providing guidance for managing natural hazard risks.

On the global level, UNDP provides a range of services to high-risk countries with the objective to support the development of their disaster risk management capacity at the local and national levels. A large part of this has been dedicated to strengthening governance arrangements for DRR, including legislative frameworks and institutional systems and providing guidance for managing natural hazard risks. Additional services provided include policy guidance, advocacy, technical assistance, global knowledge sharing and partnership building with their global counterparts. The key thematic areas of its services include the following:

- Global Risk Identification Programme
- Capacity for Disaster Reduction Initiative
- Climate Risk Management
- Urban Risk Management
- Governance and Mainstreaming of Disaster Risk Reduction into Development Planning
- Gender Sensitive Disaster Reduction and Recovery
- International Recovery Platform (Preventionweb, "BCPR-UNDP").

In 2001, the **Bureau for Crisis Prevention and Recovery (BCPR)** was created following the recognition by UNDP's Executive Board that, "crisis prevention and disaster mitigation should be integral parts of sustainable human development strategies" (DP/2002/2). The BCPR provides the UNDP with technical and financial support to carry out its DRR work in disaster-prone countries, which includes

*development of comprehensive disaster risk reduction (DRR) programmes, strengthening of institutional and legislative systems, implementation of community-level disaster preparedness activities, including contingency planning and early warning, and establishment of coordination mechanisms to ensure the integration of risk reduction into human development as well as the development of national capacities for recovery planning.*¹⁰⁴

The BCPR serves as the practice leader for crisis prevention and recovery within UNDP. On the ground, BCPR works closely with country offices and their national counterparts, providing technical assistance, best practices and financial resources in support of their prevention and recovery activities.

Finally, UNDP plays a key leadership role in the implementation of the International Strategy for Disaster Reduction (ISDR) (section 1.2.1) through UNISDR mechanisms such as the International Recovery Platform, Global Risk Identification Programme, Capacity for Disaster Reduction Initiative and Partnership for Environment and Disaster Risk Reduction (Ibid).

3.1.3 UN-OCHA

OCHA, in collaboration with the Inter-Agency Standing Committee (IASC), is the arm of the UN responsible for bringing together national and international humanitarian actors in the event of an emergency or crisis, to ensure a coherent response. OCHA ensures that a framework is in place through which all actors involved may contribute to the overall response effort. OCHA's primary role is to support the **UN Resident Coordinator (RC)** or **Humanitarian Coordinator (HC)**, generally the most senior UN official in the country, and ensuring that coordination takes place. At the most basic level, this means ensuring that a consensus view is reached between the main responders as to what is the main problem, what are the priorities, what is going to be done about it and how it is going to be done. OCHA is part of the UN Secretariat.

The head of the OCHA, the **Under-Secretary General (USG)/Emergency Relief Coordinator (ERC)**, reports directly to the Secretary-General of the UN and is responsible for the oversight of all emergencies requiring UN humanitarian assistance. The USG/ERC acts the central focal point for governmental, intergovernmental and non-governmental relief activities and also chairs the IASC (see 3.1.4) as the ERC.

OCHA has two main coordinative functions in the event of a crisis or disaster. First, it coordinates the humanitarian actors within the **"cluster system"**. Clusters are groups of UN and non-UN humanitarian organisations in each of the main sectors of humanitarian action (e.g., water, logistics, emergency shelter) and have clear responsibilities for coordinating in the event of a disaster. There are around 10 clusters (Table 5) which are led by appointed cluster leads (UN bodies). The IASC is responsible for designating the clusters in a given scenario.

¹⁰⁴ PreventionWeb, "Bureau for Crisis Prevention and Recovery – UNDP (BCPR-UNDP)," accessed 18 November 2014. <http://www.preventionweb.net/english/professional/contacts/profile.php?id=2724>.

Table 5. UN-OCHA Clusters and Cluster Leads¹⁰⁵

Cluster	Lead Agency
Coordination of camps	UNHCR / IOM
Water and sanitation	UNICEF
Health	WHO
Emergency shelter	UNHCR / IFRC
Food and nutrition	UNICEF
IT/Telecommunications	OCHA / UNICEF / WFP
Logistics	WFP
Early recovery	UNDP
Education	UNICEF and Save the Children Alliance
Agriculture	FAO

The Cluster Lead Agency is the focal point for a given cluster. In global terms, the Cluster Lead is responsible for strengthening system-wide preparedness and coordinating technical capacity to respond to humanitarian agencies in their respective sector. At the country level, Cluster Leads are the main contacts for a government and the various teams to ensure that humanitarian activities are coordinated. When a disaster strikes, it is the RC/HC and the Humanitarian Country Team (HCT) in the affected country that are responsible for facilitating preparedness of the response operation through the clusters. OCHA provides direct support to the HC and HCT, facilitates inter-cluster coordination and advises the HC and HCT on the activation of the cluster approach and the coordination structures to employ (IASC, 2015).

The second coordinative function of OCHA is the coordination of humanitarian actors within the **On-side Operations Coordination Centre (OSOCC)**. This concept was originally developed jointly by OCHA and the International Search and Rescue Advisory Group network to assist affected countries in coordinating relief efforts and international search-and-rescue efforts following an earthquake. However, it is now used for any sudden-onset disaster involving international relief resources. The concept has been used during numerous disasters including floods, hurricanes, tsunamis and complex emergencies.

An OSOCC has three primary objectives:

- To be a link between international responders and the Government of the affected country;
- To provide a system for coordinating and facilitating the activities of international relief efforts at a disaster site, notably following an earthquake, where the coordination of many international USAR teams is critical to ensure optimal rescue efforts;

¹⁰⁵ UN-OCHA, "UNDAC Field Handbook 2013," 6th Edition, Section A, p. 10.

- To provide a platform for cooperation, coordination and information management among international humanitarian agencies.

The OSOCC's size and functions vary according to the scale of the disaster. However, the basic structure (shown in the graphic below) should be modified to suit the requirements of each situation.

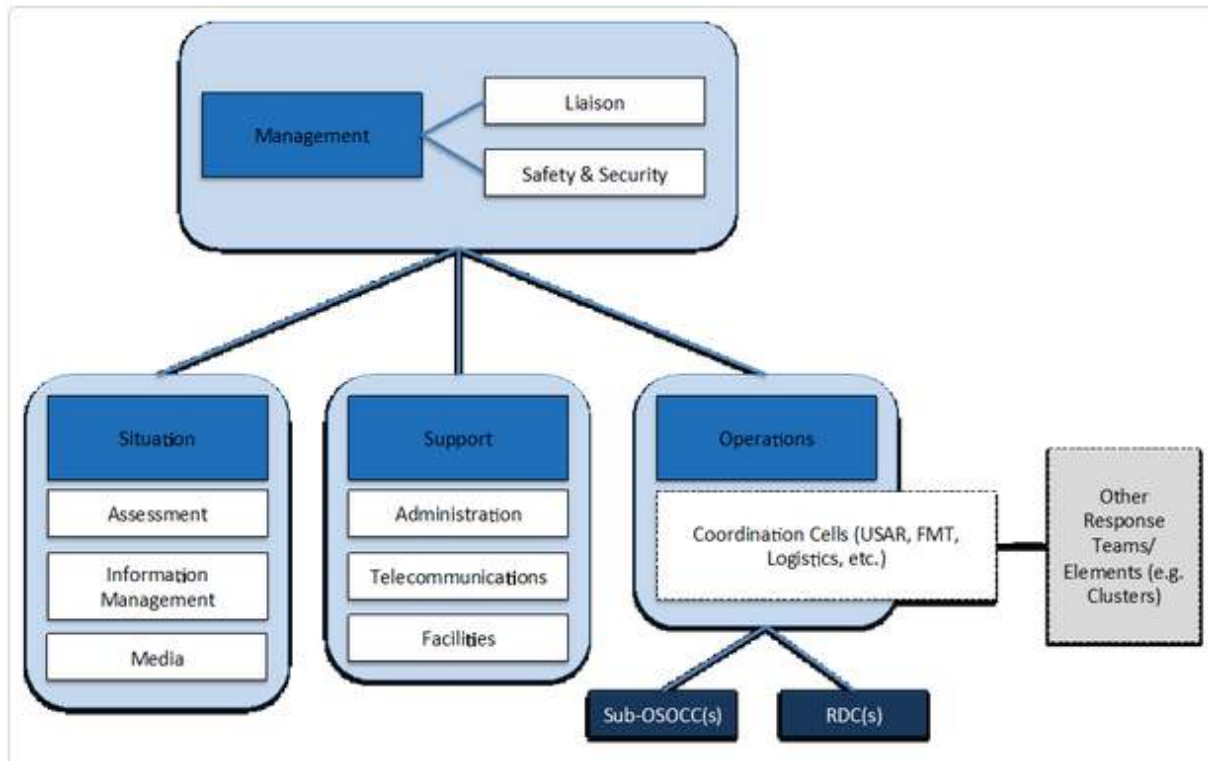


Figure 16: OSOCC Management Structure¹⁰⁶

Within OCHA, the **Emergency Services Branch (ESB)** is responsible for developing, mobilizing and coordinating the deployment of OCHA's international rapid response tools and services such as such the **United Nations Disaster Assessment and Coordination (UNDAC) system**, the **International Search and Rescue Advisory Group (INSARAG)** and civil-military coordination, cluster approach, needs assessment, HC/RC coordination support, information management and humanitarian financing systems (CERF, CAP, Flash Appeals). The ESB is comprised of various sections, through which it channels its capabilities, services and tools. These are:

- Emergency Relief Coordination Centre (ERCC)
- Field Coordination Support Section (FCSS)
- Civil-Military Coordination Section (CMCS)
- Environmental Emergencies Unit (EEU)
- Logistics Support Unit (LSU)
- Surge Capacity Section (SCS)
- Emergency Preparedness Section (EPS)
- Field Information Services Unit (FIS)

¹⁰⁶ UN-OCHA website, "OSOCC & RDC," accessed 19 November 2015 <http://www.unocha.org/what-we-do/coordination-tools/osocc-rdc/overview>,

- Information Technology Section (ITS)
- Integrated Regional Information Networks (IRIN)
- ReliefWeb

A brief description of each of the Sections is taken from the MSB Handbook (2009):

Emergency Relief Coordination Centre (ERCC) – The ERCC is OCHA's coordination centre, designed to support the organization's coordination role in disasters and humanitarian emergencies. This includes internal coordination among OCHA's Geneva, New York and regional / field offices as well as the coordination of other humanitarian actors and disaster responders worldwide.

Field Coordination Support Section (FCSS) – FCSS manages the UN Disaster Assessment and Coordination (UNDAC) system, the International Search and Rescue Advisory Group (INSARAG), the Americas Support Team (AST) and the International and Asia-Pacific Humanitarian Partnerships (IHP/APHP). UNDAC is a network of deployable disaster management professionals nominated and funded by governments and organizations. INSARAG is a network of urban search and rescue (USAR) providers that defines global standards for earthquake response. Both are discussed in detailed below. AST/IHP/APHP are networks of providers of Support Modules (equipment and staff) that can be deployed at short notice and at no cost to support UNDAC missions and other humanitarian actors in the field. As such, FCSS manages partnerships with NGOs, Private Sector and governmental/intergovernmental networks that support OCHA's role in establishing on-site coordination in sudden onset disasters.

Civil-Military Coordination Section (CMCS) – On behalf of the humanitarian community, CMCS facilitates and coordinates the access to and use of foreign Military and Civil Defence Assets (MCDA) in countries affected by humanitarian emergencies. CMCS is the focal point for governments, international organizations and military and civil defence establishments for the employment of these assets in humanitarian situations. It is also the focal point for United Nations Humanitarian Civil-Military Coordination (UN-CMCoord) in the United Nations system. UN-CMCoord is defined as the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles; avoid competition; minimize inconsistency; and, when appropriate, pursue common goals.

Environmental Emergencies Unit (EEU) – EEU is the United Nations mechanism to mobilize and coordinate the international response to environmental emergencies caused by natural disasters, industrial accidents and complex emergencies. It is a partnership mechanism between OCHA and the United Nations Environment Programme.

Logistics Support Unit (LSU) – LSU is OCHA's focal point for non-military logistics and participates in inter-agency humanitarian logistics coordination mechanisms.

Surge Capacity Section (SCS) – SCS maintains external partnerships for the provision of critical human resource needs following emergencies and disasters through the rapid and effective mobilization of additional expertise.

Emergency Preparedness Section (EPS) – EPS supports at-risk countries to reduce disaster risks by preparing for an effective response to humanitarian emergencies in line with the Hyogo Framework of Action, Priority 5 – Disaster Preparedness for Effective Response. In particular, the section partners with International Strategy for Disaster Reduction (ISDR) and UNDP (UN Development Programme) / BCPR (Bureau for Crisis Prevention and Recovery) in the Capacity for Disaster Reduction Initiative (CADRI) for the development of sustainable disaster risk reduction capacities in the UN system as well as for Governments.

Field Information Services Unit (FIS) – FIS develops information management tools for OCHA's field offices. It also deploys Humanitarian Information Centres (HICs) or smaller information management teams to emergencies.

Information Technology Section (ITS) – ITS provides information and communications technology (ICT) infrastructure, services and support to OCHA and coordinates inter-agency ICT activities.

Integrated Regional Information Networks (IRIN) – IRIN is a leading global provider of multimedia humanitarian news and analysis.

ReliefWeb - ReliefWeb is the world's leading on-line gateway to information on humanitarian emergencies and disasters.¹⁰⁷

3.1.4 The Inter-Agency Standing Committee

The Inter-Agency Standing Committee (IASC) was established in 1992 in response to UN GA Resolution 46/182 on the strengthening of humanitarian assistance. The IASC, together with Executive Committee for Humanitarian Affairs (ECHA), forms the primary mechanism for inter-agency coordination of humanitarian assistance (GA Resolution 48/57), policy development and decision-making involving the key UN and non-UN humanitarian partners. It was established in June 1992 in response to UN GA Resolution 46/182 on the strengthening of humanitarian assistance.

The following are the primary objectives of the IASC:

- Develop and agree on system-wide humanitarian policies and on a common ethical framework for humanitarian activities

¹⁰⁷ Swedish Civil Contingencies Agency, "International CEP Handbook. Civil Emergency Planning in the NATO/EAPC Countries." Swedish Civil Contingencies Agency (MSB), 2009. Accessed 18 September 2014. <https://www.msb.se/RibData/Filer/pdf/24677.pdf>.

- Allocate responsibilities among agencies involved in humanitarian programmes
- Identify where gaps exist in mandates or where operational capacity is lacking;
- Resolve disputes or disagreements among humanitarian agencies on system-wide humanitarian issues (UNISDR 2013).

The IASC formulates humanitarian policy that ensures a coordinated and effective response to all kinds of disaster and emergency situations. IASC is the main decisional body for humanitarian issues and is responsible for planning the types of missions to be taken, as well for proposing policy, guidelines and priorities to be made. Membership and structure of the IASC is discussed in section 3.1.4.

Members of the IASC include: FAO, OCHA, UNDP, UNFPA, UN-HABITAT, UNHCR, UNICEF, WFP, WHO. Standing Invitees of the IASC include: ICRC, ICVA, IFRC, InterAction, IOM, OHCHR, RSG on Human Rights of IDPs, SCHR and the World Bank.

Coordination in the IASC takes place at several different levels. This is shown in Figure 17.

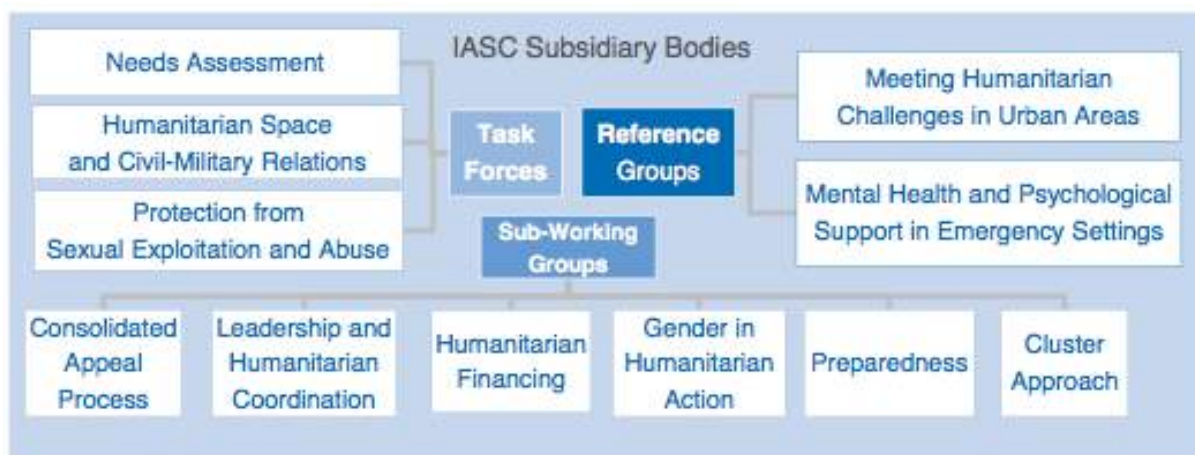


Figure 17: IASC Subsidiary Bodies¹⁰⁸

The organisations that comprise the IASC are headed by the IASC Principals, while the emergency directors or other directors of the IASC organisations are brought together within the IASC Working Group. The IASC Principals and the IASC Working Group may be assisted by IASC Subsidiary Bodies, which may be sub-working groups, task forces or reference groups, for work on specific policy questions and related tasks. Guidance, tools and handbooks produced by these groups are referred to as “IASC products”.

¹⁰⁸ OCHA (2012). “Inter-Agency Standing Committee.” *OCHA on Message*, March 2012.

3.2 Organisational cooperation

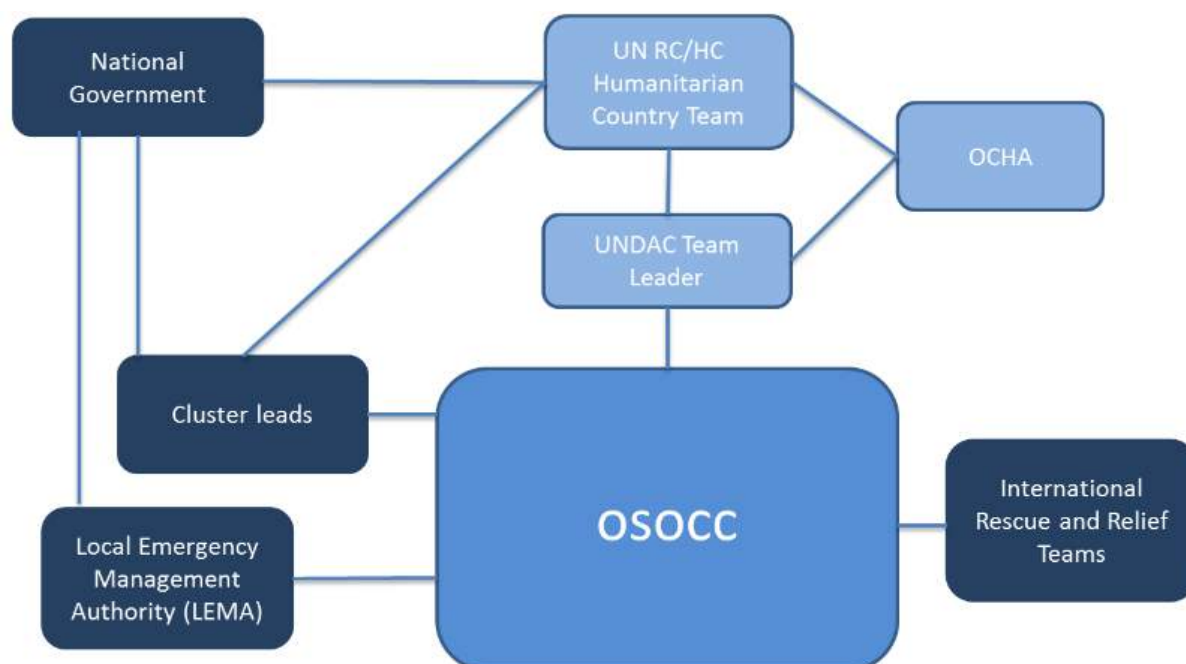
3.2.1 Operational cooperation

In the event of a crisis or disaster occurring outside the EU, the UN – chiefly through the UN-OCHA – is responsible for coordinating all humanitarian assistance to the country in question. As stated in the ACRIMAS report,

This is a provision that is highly acknowledged within the EU, among the Commission and most of the Member States. When the EU Civil Protection Mechanism was established in 2001, Member States humanitarian assistance to an affected country could from that day on not only be given for example bilaterally or through the UN, but also through the EU. Thus there was a need to broaden cooperation between the EU and UN as regards humanitarian assistance from the already existing cooperation in relation to financial aid to cooperation in humanitarian assistance missions as well....¹⁰⁹

When a natural disaster strikes, OCHA can deploy self-contained and fully equipped response coordination specialists within 24-48 hours through the **United Nations Disaster Assessment and Coordination (UNDAC) system**. UNDAC comprises a standby team of volunteer emergency managers with varied skills. The **On-Site Operations Coordination Centres (OSOCC)** is established as soon as possible by the first arriving international urban search-and-rescue team or UNDAC team deployed by OCHA.

The following illustration shows how the OSOCC works with other entities once it has been established.



¹⁰⁹ Hans-Martin Pastuszka, "Report on Current CM Framework," Aftermath CM System-of-systems Demonstration (FP7 ACRIMAS project, January 2011), 30-31. Accessed 18 November 2008.

Figure 18: OSOCC Context¹¹⁰

The OSOCC Guidelines state,

The OSOCC generally reports to the UNDAC Team Leader, who in turn ensures that activities of the OSOCC are aligned with the strategic direction of the UN RC/HC and the HCT, and supported by OCHA. In cases where an UNDAC Team is not deployed, the OSOCC may report directly to the UN RC/HC.

The OSOCC works in support of the affected government in coordinating the efforts of international response organisations. Within the affected country, the Local Emergency Management Agency (LEMA) is responsible for the overall command, coordination and management of the response operation, thus the OSOCC maintains a strong connection to the LEMA throughout operations.

In addition to the entities within OCHA and within the affected country, the OSOCC supports and collaborates with Cluster Leads and responding teams. This can be done through integration in the OSOCC structure, including physically being located in the OSOCC facility, and/or through formal or informal liaison.¹¹¹

3.2.2 Organisational cooperation

The IASC and ECHA form the primary mechanism for inter-agency coordination of humanitarian assistance within the UN system.

Below the system-level of coordination, many other UN agencies and programmes have mandates pertaining to organisational cooperation for capacity development, both internally and with other UN bodies. For example, the Emergency Preparedness Section (EPS) of the ESB partners with ISDR and UNDP/BCPR, in the CADRI initiative to develop sustainable DRR capacities both within the UN system and for Governments. The UNISDR has established numerous mechanisms for organisational coordination, including the national and regional platforms and thematic platforms led by specialised agencies or technical institutions.

UN coordination with EU mechanisms

UN has a significant relationship with the EU. The EU is a major donor to UN agencies and programmes. Financial relations are governed through a financial and administrative framework agreement signed in 2003.

Under Council Decision 1313/2013 Art. 5(2) and Art 13(3), the European Commission, at the request of the United Nations or its agencies, “may deploy an expert team on site to provide advice” on preventive actions as well as on preparedness measures. The latter covers training, exercises, lessons learnt and knowledge dissemination. Article 9 further specifies that preparedness actions of the

¹¹⁰ UN-OCHA, FCSS “OSOCC Guidelines,” December 2014.

https://docs.unocha.org/sites/dms/Documents/2014%20OSOCC%20Guidelines_FINAL.pdf.

¹¹¹ Ibid, p. 11.

Member States to support the needs of the Union Mechanism must be “able to cooperate with other Union bodies and/or international institutions, in particular the UN, as appropriate”.

Regarding disaster response assistance interventions outside the EU, support actions undertaken either by the Member States or the Union as a whole are to be facilitated by the Union Mechanism and “shall be fully integrated with the overall coordination provided by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and shall respect its leading role” (Council Decision 1313/2013, Art. 16).

Finally, in terms of response operational coordination, the European Commission’s Humanitarian Aid and Civil Protection Organization (ECHO) is a regular preparedness and response partner of the UNDAC system. UNDAC members may work with, or train with, the EU’s Emergency Response Coordination Centre (ERCC), which is a part of the EU CPM, as well as with European Union Civil Protection Teams (EUCPTs) that have been deployed. The ERCC, operated by ECHO, is operational at all times and serves as the European focal point for information management, offering assistance and coordination of deployed assets (which include thirteen rapid response modules). The EUCPTs are comprised of experts that are highly skilled in areas such as coordination and assessment. The operational relationship between UNDAC and EUCPT can range from “general liaison” to “integration” depending on the location and scale of an emergency (OCHA, 2013).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

There are many written SOPs pertaining to the respective UN bodies and sub-teams involved in crisis management and disaster risk reduction, including for specific occasions. An exhaustive list of all existing SOPs across all relevant UN bodies could not be developed or obtained within the context of this study, thus specific information on the scope of the SOPs, their acceptance by the involved parties and the manner and frequency of tests conducted is not available. However, a few examples are as follows:

SOP for Early Recovery Operations

The 2008 IASC Guidance note on Early Recovery includes in the Annex an overview of SOPs for designating sector/cluster leads in major new emergencies in the first 24 hours of an emergency, as well as in ongoing emergencies.

STANDARD OPERATING PROCEDURES FOR DESIGNATING SECTOR/CLUSTER LEADS IN MAJOR NEW EMERGENCIES

At the onset of the emergency (if possible, within the first 24 hours):

Step 1. The HC (or RC, in countries where an HC has not been appointed) consults national authorities/counterparts and relevant IASC partners at the country level (NGOs, international organizations, the International Red Cross and Red Crescent Movement and UN agencies) to determine priority sectors or areas of activity for the emergency; which agencies are best placed to assume the role of sector/cluster lead for each one; what thematic groups are needed to address cross-cutting issues; and what support is needed from OCHA and other actors in terms of common tools and services.

Step 2. Based on these consultations, the HC (or RC) draws up a proposed list of sectors with designated sector/cluster leads for each. The HC (or RC) may also propose the establishment of thematic groups for particular priority cross-cutting issues. The HC (or RC) forwards this list to the Emergency Relief Coordinator (ERC), addressed to holmes@un.org, requesting endorsement within 24 hours from the full IASC at the global level.

Step 3. The ERC shares this proposal with the IASC, requesting endorsement or alternative proposals.

Within 24 hours of receiving the proposal from the HC (or RC)

Step 4. The ERC ensures agreement is reached within the IASC at the global level. Where agencies at the global level propose arrangements that differ from those initially proposed by the HC (or RC), the ERC consults the HC (or RC) and IASC further in order to reach agreement.

Step 5. The ERC communicates the decision reached to the HC (or RC) and all relevant partners at global level.

Step 6. The HC (or RC) informs the host government and all relevant country-level partners of agreed arrangements within the international humanitarian response. Common Humanitarian Action Plans and appeal documents should clearly state the agreed priority sectors and the designated leads for each.

Figure 19: SOP for designating sector/cluster leads in major new emergencies¹¹²

The next figure details the SOP for Early Recovery support after the first 24 hours of the emergency have passed.

¹¹² IASC, "Guidance Note on Early Recovery," 2008.

Trigger for SOP- Imminent crisis event in a country (a new crisis or dramatic deterioration of an existing situation)

STEP	ACTION	TIMELINE
PRE-CRISIS OR SUDDEN IMPACT CRISIS EVENT		
1	Contact RC/HC and request SITREP from country	Pre-Crisis OR Within 24 Hrs
2	Issue Stand By "Alert" Message"	Pre-Crisis OR Within 24 Hrs
3	Activate individual stand-by emergency procedures.	Pre-Crisis OR Within 24 Hrs
INITIAL ASSESSMENT		
4	IA Country Team meets to decide scale of emergency	Pre-Crisis OR Within 24 Hrs
4a	LEVEL 1 RESPONSE Monitor situation closely and remind RC of available support services	Pre-Crisis OR Within 48 Hrs
RAPID RESPONSE		
4b	LEVEL 2 RESPONSE Brief and deploy "ER Specialist" to country (with or without UNDAC Team)	Pre-Crisis / Within 48 Hrs
POST CRISIS		
4c	ERC ¹ consults with IA HQ Agencies on cluster activation request	Within 5 days
5	Cluster approach is adopted for country X	Within 5 Days
6	LEVEL 3 RESPONSE 1st emergency meeting	Within 5 Days
SURGE IMPLEMENTATION		
7	Brief and deploy "ER Advisor" to country	Within 7 Days
8	Link with existing coordination and information networks including other Global Clusters.	Within 7 Days
9	2nd CWGER emergency meeting and decide on Joint or IA assessment mission	Within 1-2 Weeks.
10	Fund and Deploy Joint ER Needs Assessment "IA SURGE team." • Conduct Joint Needs Assessment • Develop IA Strategic Framework	Within 2-3 Weeks for up to four (4) weeks.
11	Evaluate Needs Assessment and IA Strategic Framework	Within 4-5 Weeks.
12	Mobilize funds for implementation of IA Strategic Framework	Within 6-8 Weeks.
13	IA Strategic Framework implementation.	Within 10-12 weeks for up to 18 months.
14	Coordinate implementation of IA ER Strategic Framework	Up to 18 months
SURGE DEACTIVATION		
15	"ER-Coord/Advisor" converts to "Recovery Coordinator/Advisor" OR exits country.	Within 2-18 months
16	Hand over programmes and exit country	Within 2-18 months
17	3rd CWGER (after action) meeting and lessons-learned exercise.	Within 1-2 years
18	Publication/dissemination of lessons learned.	Within 1-2 years

Figure 20: Standard operating procedures for activation and deployment of Early Recovery Support for Disasters¹¹³

SOPs between EU bodies and UN-OCHA

The EU and OCHA agreed on SOPs in 2004, which are set out in the Commission Decision *on approving the exchange of letters between the UNOCHA and the Commission of the European Communities concerning their cooperation in the framework of disaster response (in case of simultaneous interventions in a country affected by a disaster)*. These are very general and outline overall principles to ensure continued and enhanced coordination in response operations in situations in which both the EU and UN bodies are deployed. However it does not appear these have been updated since then, thus not reflecting the merge of EU CP to DG ECHO and the new provisions of the Lisbon Treaty (Commission, 2005).

4.2 Operations planning

There are many operations planning documents to guide the activities of the operational actors in the event of a crisis. These can be retrieved in English on the respective websites of the different UN bodies. Examples include:

- UNDAC Field Handbook (2013)
- OSOCC Guidelines (December 2014)
- Guidance note on Using the Cluster Approach to Strengthen Humanitarian Response (OCHA, November 2006)
- Inter-Agency Contingency Planning Guidelines for Humanitarian Assistance (IASC, December 2007)
- Operational Guidance on Responsibilities of Cluster/Sector Leads and OCHA in Information Management (OCHA, December 2008)
- IASC Handbook for RCs and HCs on Emergency Preparedness and Response (IASC, March 2011)
- IASC Emergency Response Preparedness (ERP) (Draft for field testing) (IASC, July 2015)
- Reference Module for the Implementation of the Humanitarian Programme Cycle (IASC, July 2015)
- Reference Module for Cluster Coordination at Country Level (IASC, revised July 2015)

EU-UN planning

The EU CPM developed an SOP manual that includes guidance on the most important parts of the command, control and coordination structure at the operational level during operations in non-EU countries. The manual states,

During emergencies outside the EU, the command, control and coordination structure is established by the affected country and/or UN OCHA – UNDAC team if asked for by the affected country. In case of the latter, the EU CP team may be fully or partially integrated into the OSOCC structure formed by the UNDAC team depending on an agreement between the UN OCHA and MIC prior the EU CP team's deployment.

¹¹³ IASC, “Guidance Note on Early Recovery,” 2008, Annex 8.

The diagram also shows the potential position of national coordination teams that PS may deploy for example in case of a deployment of a big number of CP modules/teams (e.g. Haiti earthquake 2010, etc.). In case the national coordination teams are not present, the operational control is executed directly by the OSOCC.¹¹⁴

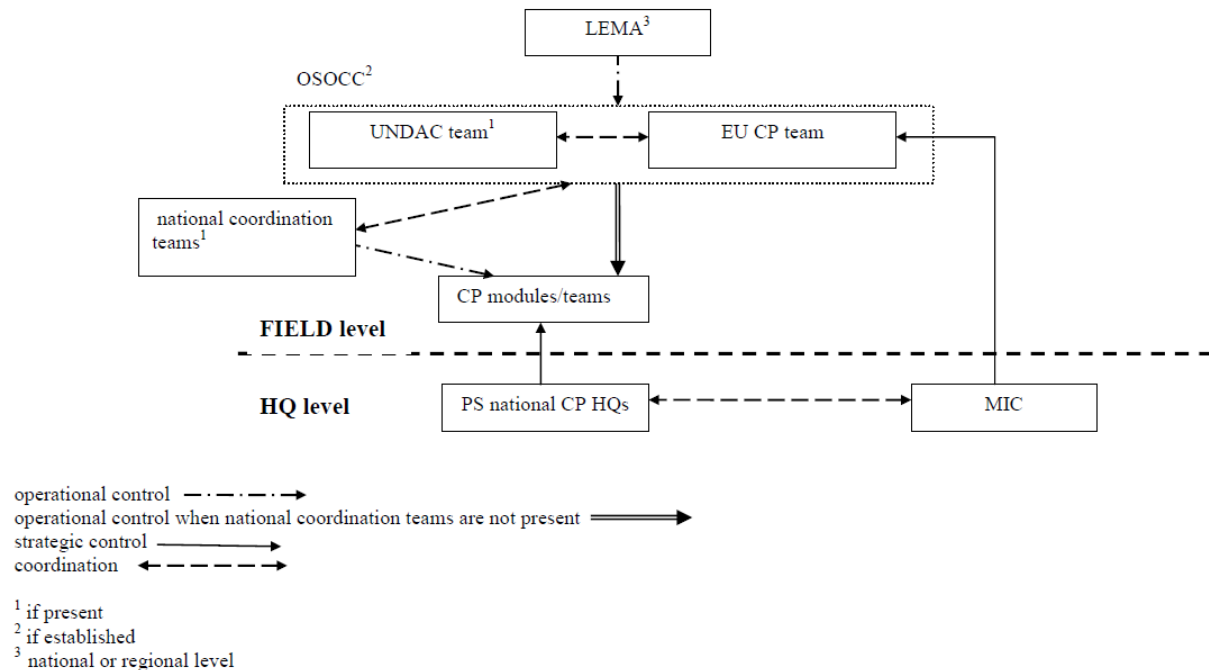


Figure 21: On-site command, control and coordination structure during emergencies outside the EU¹¹⁵

This manual also outlines the most important lines of reporting and information exchange among the main actors at the operational level during operations in EU and non-EU countries. It states,

*The leaders of the CP modules/teams should report during the on-site operation to the on-site commander minimum on a daily basis at a time set up by the on-site commander and inform the EU CP team about its activities minimum on a daily basis at a time agreed between the MIC and the modules/teams reflecting the operational needs and time zone of the operation location.*¹¹⁶

¹¹⁴ EU Civil Protection Mechanism, Guidelines for Standard Operating Procedures (SOP) for Civil Protection Modules, available <http://ipafloods.ipacivilprotection.eu/images/DOCs/EUSOPguidelines.pdf>.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

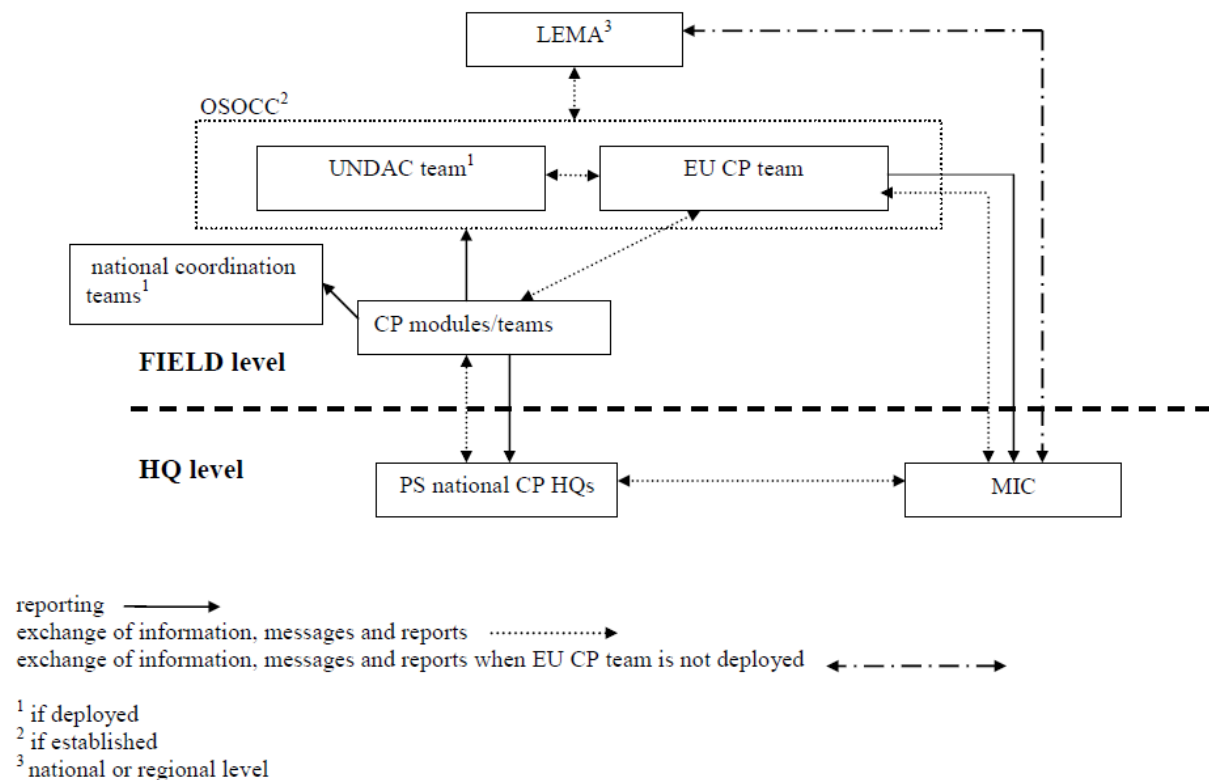


Figure 22: Reporting Lines during emergencies outside the EU¹¹⁷

4.3 Logistics support in crises

A variety of UN organisations are involved in logistics operations, which vary depending on the specific situation. Organizations commonly involved in logistics operations include:

- World Food Programme (WFP)
- United Nations Development Programme (UNDP)
- Office for Coordination of Humanitarian Affairs (OCHA)
- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Children's Fund (UNICEF)
- World Health Organization (WHO)
- International Committee of the Red Cross (ICRC)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- Non-governmental organizations (NGOs)
- Armed forces
- Private sector entities
- National authorities (OCHA, 2013).

¹¹⁷ EU Civil Protection Mechanism, Guidelines for Standard Operating Procedures (SOP) for Civil Protection Modules, available <http://ipafloods.ipacivilprotection.eu/images/DOCs/EUSOPguidelines.pdf>.

High-level roles and responsibilities of logistics support operations are as follows:

The **Logistics Support Unit (LSU)** of the ESB OCHA is the focal point for non-military logistics and participates in inter-agency humanitarian logistics coordination mechanisms. The logistics support in OCHA encompasses:

1. Maintaining an equipment reserve for OCHA;
2. Facilitating the relationship and cooperation between OCHA's corporate partner, Deutsche Post-DHL, and the Logistics Cluster in relation to providing airport-handling teams during humanitarian relief operations;
3. Ensuring, in cooperation with a number of donor governments, the adequate and timely provision of non-food items to relief operation. These are stored in the UN Humanitarian Response Depot;
4. Maintaining close relationships with the World Customs Organisation and IFRC to initiate discussions with Member States, and promote the implementation of customs-facilitation measures for importing emergency relief items;
5. Ensuring in partnership with the Logistics Cluster, the overall management of the global mapping of emergency stockpiles.¹¹⁸

Disaster Response Teams (DRTs) are established via the strategic partnership between DHL, Deutsche Post World Net and OCHA to support the relief efforts of the UN system and the international community. The teams provide logistical expertise for incoming shipments of relief goods and help to ensure an uninterrupted and effective relief supply chain at the airport closest to the scene of sudden-onset natural disaster.

OCHA also stockpiles relief goods (see 5.2).

Regarding the use of **military logistics support**,

*the Civil-Military Coordination Section (CMCS) of the ESB of the UN-OCHA, facilitates and coordinates on behalf of the humanitarian community, the access to and use of foreign Military and Civil Defence Assets (MCDA) in countries affected by humanitarian emergencies. CMCS is the focal point for governments, international organizations and military and civil defence establishments for the employment of these assets in humanitarian situations. It is also the focal point for United Nations Humanitarian Civil-Military Coordination (UN-CMCoord) in the United Nations system. UN-CMCoord is defined as the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles; avoid competition; minimize inconsistency; and, when appropriate, pursue common goals.*¹¹⁹

¹¹⁸ UN-OCHA website, "Logistics Support", accessed 19 November 2015 <http://www.unocha.org/what-we-do/coordination-tools/logistics-support/overview>

¹¹⁹ MSB Handbook, p. 291.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Communication

When an emergency occurs, OCHA's information management officers immediately start working with key partners to produce standard information products to support coordination of all the humanitarian organizations and the response operation. These include the Who What Where (3W) database, contact lists and meeting schedules. Tools such as the information need assessment and maps are made available to support better relief planning and action. The following sections within the ESB of UN OCHA are involved in crisis communication (described in section 3.1.3).

- *Field Information Services Unit (FIS);*
- *Information Technology Section (ITS);*
- *Integrated Regional Information Networks (IRIN);*
- *ReliefWeb.*

Alert systems

The UN launched a plan for a global early warning system in 2005 to reduce the deadly toll of natural hazards, combining speedy transmission of data with training of populations at risk in a strategy that experts say could have saved scores of thousands of lives. No significant progress has been made in this area.¹²⁰

The IASC Humanitarian Early Warning Service (HEWSweb) is an interagency partnership project aimed at establishing a common platform for humanitarian early warnings and forecasts for natural hazards. The service has been developed by WFP who is responsible for coordinating and managing the overall information content, design, and organization of HEWSweb on behalf of the Inter-Agency Standing Committee and its members (UNISDR, 2013).

UNISDR is actively promoting (Global) Early warning systems via the PPWE (Platform for the Promotion of Early Warning). This organisation, which started operations in 2004, will help the development of early warning and preparedness systems by advocating for better early warning systems, especially in development assistance policy and programs, collecting and disseminating information on best practices, and stimulating cooperation among early warning actors and the development of new ways to improve early warning systems.¹²¹

In addition, OCHA utilises several different electronic platforms as dissemination and information gathering tools in the event of a crisis or disaster/emergency. These are:

¹²⁰ UN, "UN Launches plans for global early warning system on natural disasters," *UN News Centre*, 19 January 2005, accessed 19 November 2015,

<http://www.un.org/apps/news/story.asp?NewsID=13077&Cr=natural&Cr1=disaster#.VG37ADZgXcs>

¹²¹ Platform for the Promotion of Early Warning," UNISDR, accessed 19 November 2015,

<http://www.unisdr.org/2006/ppew/ew-actors/un-authorities.htm>.

- **Virtual OSOCC** provides a platform for incoming and outgoing information exchange between responding governments and organisations that is operationally relevant to the UNDAC team throughout a relief operation. Users may provide comments on existing information in real-time and discuss relevant issues of concern with response team members.
- **HumanitarianResponse.info** is the platform for exchange of information with the wider community. Specific pages are set up for a given emergency situation. Tools are provided for meeting scheduling, contact directories and publishing information graphic related to the response.
- **ReliefWeb** is OCHA's humanitarian information Internet web page. It posts information from all humanitarian partners in addition to OCHA's own information
- **The Integrated Regional Information Network (IRIN)** serves as a humanitarian news agency through free-of-charge email subscription. IRIN reports are also posted on ReliefWeb. It is based in three locations in Africa: Nairobi, Johannesburg and Abidjan.

For more information, see the websites of the above mentioned platforms and organisations.

5 Capabilities

5.1 Human resources

The total number of personnel and resources of the three main crisis and disaster-related UN bodies is as follows:

As per June 2012 **UNISDR workforce** comprises 100 individuals (UNISDR, 2012).

UNDP employs more than 200 full time DRR practitioners, covering all regions, with special attention to the 60 highest risk countries (UNISDR 2013).

UN-OCHA's staff, 2,145 in total, is working through its regional and country offices and deploys staff at short notice to emergencies. It also supports several surge-capacity mechanisms (see below) and networks that enable the broader humanitarian community to respond rapidly to disasters and conflicts (UN-OCHA).

2014 STAFF MEMBERS BY LOCATION



Figure 23: UN-OCHA staff members by location, 2014 ¹²²

Capacity to mobilise

OCHA can quickly deploy specialised humanitarian personnel – i.e. surge staff – to support efforts on the ground, particularly in situations where local capacity is overwhelmed, in response to a new or

¹²² UN-OCHA, "OCHA in 2014 & 2015: Plan and Budget," accessed 19 November 2015, <http://www.unocha.org/ochain/2014-15/financial-plan>.

escalating humanitarian crisis. OCHA sets up an office in the affected country, or reinforces an existing office. OCHA has a standby team of volunteering emergency managers with varied skills. These individuals are from over 60 developed and developing countries, international agencies and NGOs. Deployed OCHA personnel can include specialists in humanitarian affairs, information management, civil-military coordination and public information. The teams can deploy within 24-48 hours of a disaster anywhere in the world.¹²³

Involvement of Volunteers, NGOs and the Private sector

OCHA maintains a number of operational partnerships with partner organizations, Governmental agencies, NGOs and the private sector, which all provide specialized support services both to the UNDAC team as well as to the wider humanitarian community. These services include logistical support modules such as ICT support, base camps, office and vehicle support, which the International Humanitarian Partnership (IHP), the Asia-Pacific Humanitarian Partnership (APHP) and the Americas Support Team (AST) can provide in order to enable an UNDAC team, OCHA staff and humanitarian organizations to work self-sufficiently in a disaster area.

Technical partnerships of the UNDAC system include NGOs such as MapAction and Telecoms sans Frontières (TSF), which can deploy with an UNDAC team and offer services such as emergency mapping and emergency telecommunications in disaster areas worldwide. UNOSAT is another operational partner, which provides satellite imagery and geographic information easily accessible to the humanitarian community. From the private sector, FCSS is closely collaborating with the DHL Disaster Response Teams who provide airport handling and logistics services to the affected country and international responders.

5.2 Materiel (non-financial) resources

UN-OCHA has a warehouse in Pisa, Italy – the UN Humanitarian Response Depot (UNHRD) – in which it stores stockpiles of relief goods that can be easily mobilised and delivered to disaster-stricken countries. The UNHRD is therefore a logistics and relief facility. The warehouse is managed by the WFP. When international assistance is sought in a disaster or emergency, the Humanitarian Coordinator, the United Nations Resident Coordinator/UNDP Resident Representative, the OCHA regional/field office or the relevant clusters are the channels for a request to OCHA for goods to be dispatched.¹²⁴

The UNDAC system additionally deploys personal and mission equipment for the UNDAC teams to be self-sufficient in the field (OCHA, 2013).

Military aid is foreseen in the Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance,” (V-2007, para. 11):

¹²³ UN-OCHA website, “Surge capacity,” accessed 19 November 2015 <http://www.unocha.org/what-we-do/coordination-tools/surge-capacity/overview>

¹²⁴ UN-OCHA website, “Logistics Support”

“Military assets should be deployed for disaster relief or initial recovery assistance only at the request or with the express consent of the affected State, after having considered comparable civilian alternatives. Prior to any such deployment, terms and conditions (including such issues as the duration of deployment, whether they must be unarmed or may be armed the use of their national uniforms, and mechanisms for cooperation with civilian actors) are to be agreed by the affected and assisting States.”¹²⁵

United Nations Humanitarian Civil-Military Coordination (UN-CMCoord) facilitates dialogue and interaction between civilian and military actors when a response effort involves the deployment of national and/or foreign military actors, assets or paramilitary organisations alongside international humanitarian organisations.¹²⁶

5.3 Training

Training is organised by all organisations separately. Major training initiatives are discussed below:

UNDP requires all RR/RCs and UNDP Country Directors/DRRs to be trained on early recovery and surge policies, practices and implementation tools. This also includes policy of rotation in recovery and crisis projects. Cross-training is organised with OCHA (UNDP, 2008).

UNDAC training consists of the following courses:

- The **UNDAC Induction course**: a series of 3 pre-Induction webinars followed by a 2-week intensive training course, upon successful completion of which participants are out on the UNDAC emergency roster provided that they sign the contract. UNDAC members are expected to make themselves available at least 2-3 times a year for emergency missions.
- The **UNDAC Refresher Courses**: a series of 4-5 day training course, which UNDAC members are required to take every 2 years in order to keep abreast of developments in methodology and the humanitarian context and improve their capacity to be operational in missions.

In addition, UNDAC members are encouraged to take other available courses such as:

- OSOCC courses, Civil Military Coordination courses, and Assessment courses and others.
- Courses provided by other entities, such as the EC Civil Protection Mechanism. (UNDAC, “Methodology and Training”)

¹²⁵ UN, 2011, International Legal Frameworks for Humanitarian Advocacy – Compendium.

¹²⁶ OCHA website, “Humanitarian Civil-Military Coordination (UN-CMCoord)” available <http://www.unocha.org/what-we-do/coordination-tools/UN-CMCoord/overview>,

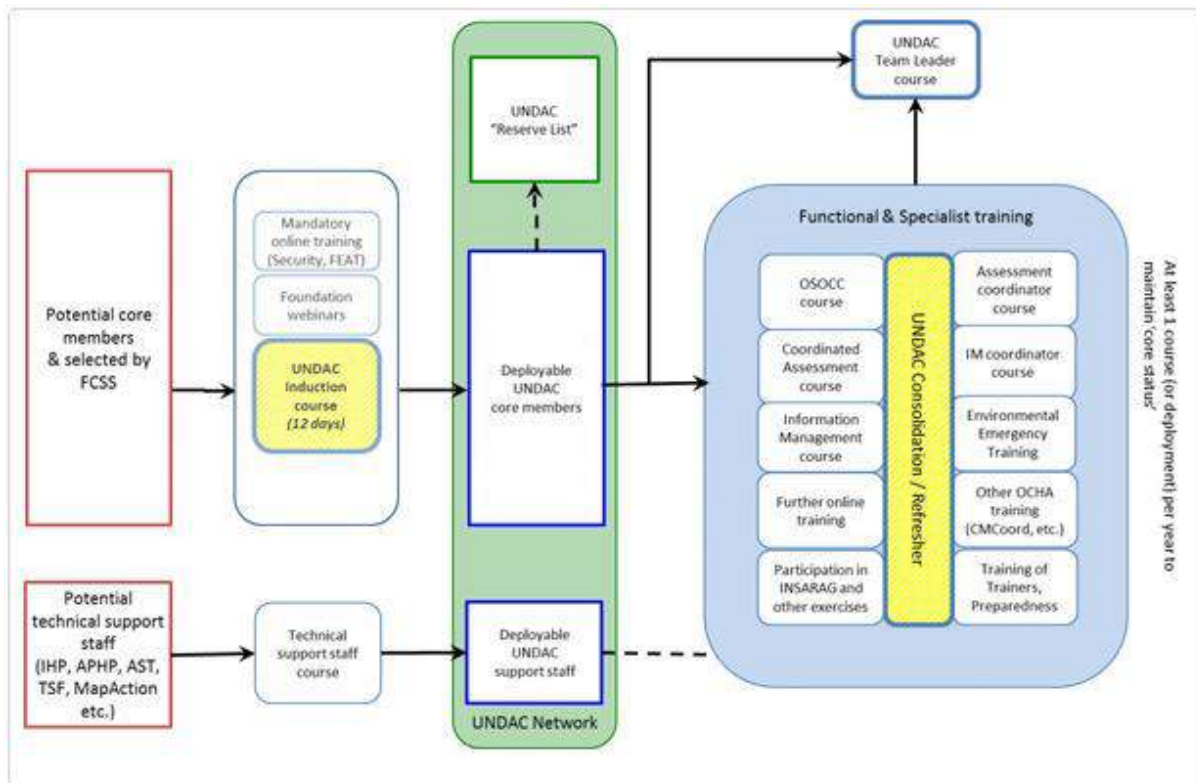


Figure 24: UNDAC Training¹²⁷

OSOCC training courses are managed and delivered by the FCSS of ESB. According to the website:

- OSOCC training courses are designed to train the participants in the OSOCC methodology, i.e. to establish a platform for coordination in a large-scale emergency with a multi-organization response. Furthermore, participants will receive training in the establishment of a Reception/Departure Centre (RDC) and Sub-OSOCC.
- The target audience for the course is urban search and rescue (USAR) liaison officers and team leaders, national emergency managers, cluster coordinators, coordinators from NGOs and from regional and international emergency management organizations, UNDAC members and technical support staff.¹²⁸

UNISDR sees training as an active part of the preparedness approach. Disaster risk reduction and education is organised as an interactive process of mutual learning between people and institutions. Therefore the organisation organises education of people living in high risk zones (UNISDR, 2013).

¹²⁷ UN-OCHA, "Methodology and Training," accessed <http://www.unocha.org/what-we-do/coordination-tools/undac/methodology-training>.

¹²⁸ UN-OCHA, "OSOCC & RDC".

5.4 Procurement

5.4.1 Procurement regulation

The UN has provided a manual for procurement, which is a compendium of regulations approved by the General Assembly and related rules published by the UN.

Scope

The procurement includes all actions for the acquisition, by purchase or lease, of property.

Procedures

The UN uses a centralized electronic register of vendors for sourcing the supply of UN needs for goods, services and works. Vendors can apply for this. The UN evaluates vendor's applications to determine whether the application complies with the UN requirements (article 7.2). These criteria are codified in article 7.6 and relate to basic information on the vendor, legal status and owners and directors etc. Article 7.5 provides the pre-requisites for vendors. For example, vendors need to declare they are not declared bankrupt or are under formal investigation.

The following general principles need to be taken into account throughout the procurement process (rule 5.12):

- Best value for money;
- Fairness, integrity and transparency;
- Effective international competition;
- The interest of the United Nations.

A key element of best value for money is identifying vendors to fulfil the needs of the contracting authority. The aim is to have multiple vendors which meet the requirements, so that competitive prices can be obtained. In order to achieve this, the contracting authority can use the UN Global Market Place, Request for Expressions of Interests, Requests for Information etc. The contracting authority shall invite all vendors registered for the works being procured that are interested. In some cases the number of vendors can be limited for example when the list of vendors is long and impractical to use, or when security issues justify a limitation (article 9.5). In order to ensure an appropriate level of competition, a minimum number of vendors should be invited. This depends on the value of the contract (article 9.6).

The UN has three kinds of procedures:

- The informal method of solicitation;
- The formal invitation to bid;
- The formal request for proposals.

In the informal method of solicitation, a Request of Quotation (RFQ) shall be used for the procurement of goods, services and works with standard and clear specifications and a value between US\$ 4,000 and US\$ 40,000. Contracts with a value less than US\$ 4,000 can be procured directly.

The formal invitation to bid (ITB) shall be used for the procurement of goods with standard and clear specifications and a total value exceeding US\$ 40,000. The contract will be awarded to the qualified bidder whose bid substantially conforms to the requirements and is evaluated to have the lowest costs. When a formal request for proposals has been used, the contract shall be awarded to the qualified proposer whose proposal is most responsive to the requirements (rule 105.15).

The request for proposals shall be used for procurement that cannot be quantitatively or qualitatively expressed in sufficient detail for the ITB. The procurement officer shall post an REOI notice on the UN Global Marketplace. This is optional when the value of the contract is below US \$ 200.000.

In several cases, the formal method may not be in the best interest of the UN. The UN can determine this, for example when there is no competitive marketplace for the procurement; when the formal procedure has not given satisfactory results or when the UN otherwise determines that a formal solicitation will not give satisfactory results. These and other exceptions are listed in rule 105.16. In these cases, the UN may solicit a single vendor for a particular procurement.

Award criteria

The procurement contracts shall be awarded on the basis of effective competition. The competitive process shall include (rule 105.14):

- Acquisition planning for developing an overall procurement strategy and methodologies;
- Market research for identifying potential suppliers;
- Consideration of prudent commercial practices;
- Methods of solicitation;
- Public bid openings.

The technical evaluation team shall conduct the technical evaluation, based on the evaluation criteria and their relative weight. The evaluation criteria are factors or specific areas of consideration that are part of the requirement specifications, TOR or SOW. The criteria should be discrete, measurable, exhaustive and verifiable components of the goods, services or works required and provide a basis for assessing each Vendor's ability to provide the required goods, services or works. It captures all underlying factors of the definition of best value for money. The specific criteria will depend on the nature of the public contract.

5.5 Niche capabilities

The niche capabilities of the UN bodies active in crisis management are as follows:

- country office presence and trust of partners;
- capacity development and thematic focus;
- UN System Coordination through the RC system;
- capacity to build global partnerships for comprehensive DRR programmes and existing networks;
- know-how and expertise to manage post-disaster recovery assessments and coordination of the Global Early Recovery Cluster (i.e. UNDP).

Resources

Legislative acts

N/A

Other normative acts

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

CIV-MIL

Armed Forces' Support to Civilian Authorities

Study on Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) of using armed forces in crisis management and disaster response

Valeri Ratchev, Todor Tagarev (CSDM)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

This study reviews this portion of the so-called ‘internal roles of the armed forces’ that relates to crisis situations emerging as a result of natural or man-made disasters. It addresses the ability of the armed forces (norms, procedures and relevant capabilities) to provide valuable support to civilian authorities in such crises.

The term ‘*support to civilian authorities*’ (SCA) refers to normative requirements to the national armed forces to contribute to the civil protection against natural and other disasters, as well as to the process by which local authorities can request military assistance from the central government in times of emergency. It also relates to the regulations and procedures for sending the country’s military personnel abroad to provide emergency support in cases of natural or other disasters.

The countries, subject of the DRIVER study,¹²⁹ represent variety of historical traditions, constitutional arrangements and/or legal provisions that determine mechanisms of using armed forces’ personnel and equipment for emergency response, rescue and relief. In this diversity some countries continue to view all military functions within the concept of the ‘total defence,’ while others have moved more quickly towards separation of civil protection from national defence.

The common characteristic throughout the cases studied is that countries tend to expand the functions beyond mere defence in an attempt to make the national military more relevant to the widening spectrum of security threats and the citizens’ expectations and demands. Most countries, and especially the members of NATO, EU, and other European countries, have determined three basic roles of the armed forces: (1) defence (collective/national); (2) contribution to international peace and stability; and (3) support to the civil authorities and the population in cases of emergencies.

For the relevant understanding of the third role, it is important to underline that it is as important as the other two, but the core military capabilities are usually built around the first and, to some extent, to the second role. In most cases the military is seen as ‘the last resort’ with a supporting role to civilian authorities for responding to crises of natural or technogenic origin.

The practice, however, very much depends on additional factors such as maturity of the civil society (level of volunteerism), decentralisation of the state power, size of the country and the military, and most of all, on the frequency, scope and destructiveness of the natural and man-made disasters.

The international contribution by military personnel and assets in providing emergency support is also on the increase. Efforts within EU and NATO have an inspiring effect on national preparations in three main dimensions: strengthening regional co-operation (cross-border missions), increasing the distance of engagement from the national territory (across Europe and beyond), and strengthening military-specific niche capabilities for rapid response, rescue and recovery operations (fire-fighting from the air, response to chemical, biological and radiological threats, pandemics, etc.).

¹²⁹ This study refers to specific aspects of the use of armed forces in support of civil authorities in Austria, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Israel, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Turkey, and The United Kingdom. The countries are selected in order to better frame the problem space of the study and to illustrate the diversity in the practices of civil-military cooperation and coordination in EU Member States and selected adjacent countries.

Table of Contents

CIV-MIL Armed Forces' Support to Civilian Authorities Study on Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) of using armed forces in crisis management and disaster response	166
Overview.....	167
Table of Contents	168
List of Tables.....	168
List of Abbreviations.....	169
1 Policy of using military for domestic disaster response and relief	170
2 Legal framework of using armed forces for domestic disaster response and relief.....	176
2.1 International norms and standards	176
2.2 Constitutionally determined disaster response and relief missions of the military	178
2.3 Domestic military missions defined by laws and other acts.....	181
3 Organisation for using armed forces in domestic disaster response and relief	191
3.1 Models of military employment in disaster response operations.....	191
3.2 Special military formations for disaster response	193
3.3 Multinational disaster response and relief formations	196
4 Specific military capabilities for domestic disaster response and relief	198
5 Impact on civil-military relations	201
Resources	204
Official documents	204
Publications	207

List of Tables

Table 1: Internal roles and specific tasks performed by the armed forces.

171

List of Abbreviations

AFDRU	Armed Forces' Disaster Relief Unit (Austria)
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
CBRN	Chemical, Biological, Radiological, and Nuclear
CCA	Crisis Co-ordination Arrangements [EU]
CEP	Civil Emergency Planning [NATO]
CHOD	Chief of Defence
CSA	Support to Civilian Authorities
DCAF	[Geneva Centre for the] Democratic Control of Armed Forces
EADRCC	Euro-Atlantic Disaster Response Coordination Centre [NATO]
EU	European Union
IRS	Integrated Rescue System (of the Czech Republic) Police of the Czech Republic
MACA	Military Aid to Civil Authorities
MCDA	Military and Civil Defence Assets
MNC NE	Multinational Corps Northeast (Danish-German-Polish military corps)
NATO	North Atlantic Treaty Organisation
NDSAR	Natural Disasters Search and Rescue (Battalion), Turkey
NGHOs	Non-Governmental Humanitarian Organizations
NRG	National Republican Guard (Portugal)
OCHA	Office for the Coordination of Humanitarian Affairs
OGDs	Other Government Departments
OSCE	Organisation for Security and Cooperation in Europe
PCR	Police of the Czech Republic
SAR	Search and Rescue
UME	Unidad Militar de Emergencias (Military Emergency Unit, Spain)
UN	United Nations
UNDAC	United Nations Disaster Assessment and Coordination
UNOCHA	UN Office for the Coordination of Humanitarian Affairs
USIP	United States Institute of Peace

1 Policy of using military for domestic disaster response and relief

The authentic idea¹³⁰ of having ‘armed power’ in the hands of the ruler involved a dual purpose, i.e. to protect the ruler from both external and internal threats. One of the remarkable Indian philosophers Chanakya (under the pseudonym Kautilya) in his work “Arthashastra – the Science of Polity” explained about 2300 years ago this aspect of governance in the following way:

The king and the kingdom are the primary elements of the state. The troubles of the king might be either external or internal. Internal troubles are more serious than external troubles, which are like a danger arising from lurking snake.¹³¹

Some authors see that “...in the public mind, there is an association between disaster relief and military involvement; indeed, there is often an expectation that military units will assist the civilian population in the immediate aftermath of large-scale emergencies” and find earliest recorded cases in the times of Alexander the Great.¹³²

The term “support to civilian authorities” belongs to the modern times, but is not really new in defence policy analysis. It is related to the time of splitting security of the state on external and internal and the relevant separation of the armed powers into ‘military’ and ‘police.’ To provide support to civilian authorities usually means to respond to their request to use military force for law enforcement purposes when the capacity of local police or militia have not been sufficient to maintain the political status quo. In this context, the regimes “made distinction between using the army for internal and external security duties.”¹³³

Post-World War II Europe adopted what was conceivably most wide-ranging use of the military in civil affairs. It is important to recognise the influence this had both on military doctrines of civil involvement and on development of the international relief system and the approaches that relief agencies have used since then. While the involvement of the military in relief operations has some impressive examples, such as the 1948-49 Berlin airlift, a specific military function between the ‘war time’ and ‘peace time’ has been established in both NATO and Warsaw Pact countries – the ‘civil defence.’ On one hand, this has been the mechanism to engage the huge capacity of the armed forces in support of civil authorities and local population in any emergency. The term ‘defence’ in this case is more related to ‘protection’ and ‘support’ than to the wartime defence of the nation.

On the other hand, ‘civil defence’ has been seen as an instrument to dilute the boundary between long peace life and the potentially rapid transition to war in public psychological and organisational aspects. Despite the formal differences between the Cold War communist states and the Western

¹³⁰ Thomas Hobbes pointed to the role of “the sovereign” as a ruler who takes responsibility to protect subordinated people – whether they want that or not. See Thomas Hobbes, *Leviathan* (Cambridge; New York: Cambridge University Press, 1996), pp. 115-122.

¹³¹ B.K. Chaturvedi, *Kautilya’s Arthashastra* (Dimond Pocket Books, 2001), p. 128. Quoted also by Brig. P.K. Mallick in his 2007 article “Role of the Armed Forces in Internal Security: Time for Review,” *CLAWS Journal* (Winter 2007).

¹³² Frederick C. Cuny, *Use of the Military in Humanitarian Relief* (Niinsalo, Finland, November 1989).

¹³³ Mallick, “Role of the Armed Forces in Internal Security: Time for Review,” p. 68.

nations, in both the defence against military aggression has been seen as ‘traditional’ role of the armed forces, while all other roles have been qualified as ‘non-traditional’ or ‘supporting’ roles.¹³⁴

Since the end of the Cold War, the wider application of the concept of ‘comprehensive security’ has led to expansion of the non-traditional roles in both the external and internal domain. At the international arena, these are the variety of peace operations, some of them at the brink of a real war (the so called peace-making), military humanitarian missions including for post-conflict, natural disasters and pandemics support, as well as different forms of military partnerships and confidence and security building measures. Later, to the list was added the fight against international terrorism and related military interventions, along with engagements under the policy of ‘responsibility to protect.’¹³⁵

Internally, there is a trend of expanding the non-military roles of the national armed forces. A DCAF-sponsored study underlines that “Governments and societies have been contemplating the appropriateness of newly defined or previously mainly secondary purposes for their armed forces, which extend beyond their core role of national defence.”¹³⁶ The authors of that study identify the following groups of internal military roles:¹³⁷

Table 6: Internal roles and specific tasks performed by the armed forces.

Law enforcement-related tasks	Disaster assistance-related tasks	Environmental assistance-related tasks	Cross-over tasks	Miscellaneous community assistance
Public order Counterterrorism Border control Drug enforcement Law enforcement Crime investigation Support for major public events Building and personnel security Cyber operations Intelligence gathering	Domestic catastrophe response Disaster relief	Environmental protection	Search and rescue Training Monitoring Equipment and facility provision Miscellaneous maritime activities Scientific research	Examples include colour guard for parades; harvest support

Source: Albrecht Schnabel and Marc Krupanski, *Mapping Evolving Internal Roles of the Armed Forces* (Geneva: Geneva Centre for the Democratic Control of Armed Forces, 2012).

If one takes the disaster assistance role in focus, then again two general cases are identified. The use of military forces, or personnel and assets for international aid in cases of natural or man-made disasters is expanding in scope and form. In the first case, the engagement of military is necessary to provide security and vital service support to traditional humanitarian actors, for example the provision of transportation, theatre communications, air-evacuation, etc. In the second case, the militaries

¹³⁴ On a finer level of examination, definitions may be specific to individual countries.

¹³⁵ See the section “Responsibility to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity,” in 2005 World Summit Outcome, UN General Assembly Resolution A/RES/60/1, 24 October 2005, available at www.un.org/en/preventgenocide/adviser/responsibility.shtml.

¹³⁶ Albrecht Schnabel and Marc Krupanski, *Mapping Evolving Internal Roles of the Armed Forces* (Geneva: Geneva Centre for the Democratic Control of Armed Forces, 2012).

¹³⁷ Schnabel and Krupanski, p. 19.

have been assigned a major role in extremely dangerous humanitarian situations, such as the case of Ebola pandemics in Western Africa. The primary objective of humanitarian support and aid is to save lives, alleviate suffering, and maintain human dignity.

The trend of expanding military roles in international disaster response, relief and humanitarian operations is not supported unanimously. According to Charles-Antoine Hofmann and Laura Hudson from the British Red Cross

Humanitarian actors view these developments with a wary eye. In the US, the NGO consortium Inter-Action has raised concerns about the newly established US Command for Africa (AFRICOM), whose tasks include supporting humanitarian assistance. Growing interest within the European Union in deploying civil defence and military assets outside EU territory has prompted similar concerns. Critics of the military's involvement in relief claim that it is inefficient, inappropriate, inadequate and expensive, contrary to humanitarian principles and driven by political imperatives rather than humanitarian need.¹³⁸

As a result of such concerns, the international aspect of the military activities and the related impact on civil-military relations is fairly well studied and codified in terms of case-specific codes of conduct and field manuals.¹³⁹

The use of military for internal emergency response is the less controversial compared to all other forms of internal use of military as it meets the highest public demands about 'the role of the state in cases of people in trouble' and has indisputable political value. There is no country that explicitly restricts the use of armed forces in domestic emergencies. Just the opposite, as a rule, support to civil authorities is defined as one of the core doctrinal roles of the national military. Obviously, the countries within the scope of this study avoid the formula of 'civil defence' (the dominant idea of which is during the peacetime to make the population better prepared for war) towards 'civil protection' (with focus on the protection of the life and health of the people and their property as their constitutional citizen right).

'Civil protection' is defined as an effort at all levels of government and private actors to protect people, infrastructure, the functioning of central and local administration from hazards of a natural and man-made character. The determination of the respective military roles depends largely on a country's specific traditions, available emergency response capacities, national culture on volunteering and securing life and property, political-administrative organisation of the state, etc.

Despite the recent development, one principle is clearly followed in Europe: the country's system of civil protection is civilian-based and dominated, while the military has only a supporting role. The military could be neither the key factor for prevention and resilience, nor are they completely able to restore damaged technical and social infrastructure. Armed forces have a supportive role set in law, policy, and practice. The responsibility for response and for command in an emergency is for the civil

¹³⁸ Charles-Antoine Hofmann and Laura Hudson, "Military responses to natural disasters: last resort or inevitable trend," *Humanitarian Exchange Magazine* 44 (September 2009), quote on pp. 29-30.

¹³⁹ See for instance United Nations, *Civil-Military Coordination Officer Field Handbook*, version E 1.0 (10 March 2008); UN Office for the Coordination of Humanitarian Affairs, *United Nations Disaster Assessment and Coordination* (UNDAC Field Handbook), 6th ed., 2013; UNOCHA Publications on *Humanitarian Civil-Military Coordination*, available at www.unocha.org/what-we-do/coordination-tools/UN-CMCoord/publications; see in particular *Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief* (Oslo Guidelines), rev. 1.1 (UNOCHA, 2007); USIP *Guidelines for Relations between US Armed Forces and NGOs in Hostile or Potentially Hostile Environments* (2007); Oxfam, *OI Policy Compendium Note on the Provision of Aid by Foreign Military Forces*, Update (April 2012).

authorities. Based on the international experience, the conceptual construct of the military involvement in civil protection may include:

- Legally defined rules of military operations at home;
- Military support provided upon the request of a civil authority, for concrete aims/ operation (there might be a few exceptions to this rule);
- The military provide what is required and what is possible;
- They operate under civil direction and management, remaining within their military chain of command;
- Military engagement is limited in time and should not lead towards building civil dependence on the military presence;
- All military operations are funded or reimbursed by the state budget or other sources.

However, even these principles of military involvement are under pressure. The first reason is the growing number of large and extremely dangerous disasters in which the military capabilities are used as first response. A second reason is the expanding list of new issues recently seen as threatening the civil domain, e.g. threats to cyber security, vulnerabilities of critical infrastructures, potential terrorist use of chemical, biological, or radiological agents, massive illegal immigration, etc. And third, there are various 'institutional' factors driving the growing interest of the military in responding to disasters: assisting relief efforts can improve the military's image and provide training opportunities, and may also be a way for the military to diversify their role at a time when armed forces throughout the European countries are experiencing budget cuts. With an increase in the incidence of natural disasters, national militaries can be expected to play a bigger role – particularly in large-scale disasters, where the capacity of civil authorities may be stretched.

From the military point of view, in the nations covered by the study, the conceptualisation of their 'new' roles, also in cases of emergency, is dominantly politically driven. Theoretically, even pacifists would probably admit that no one can respond as quickly and efficiently to a major disaster at home as the military. The proliferation of roles, different and distanced from those related to 'national defence' (deterrence, defence, offence), is related to doctrinal changes, additional equipment (not always relevant to the classical military roles), and new training (including in case-specific rules of engagement). When all these developments are well funded and gradually applied, the military experience the change as relevant to their culture and working style. When the addition of new military roles is limited to the approval of a doctrinal text, then the military face significant challenges in terms of motivation, legal arrangements of their activity and, most of all, the development of relevant capabilities.

Another important conceptual issue is generated by the fact that the engagement of (the European) military in emergencies at home is much more common, compared to their use in military combat operations at home or on European soil. The peacetime military air policing, maritime patrolling, combat training, etc. are not so 'visible' as is their support to civil authorities. This tendency is building a sense of politically and publicly driven rearrangement of the doctrinal military roles, despite that very rarely they are prioritised as 'first,' 'second,' 'third' role/mission, etc. Such thinking may affect the development of military capabilities (for example, obtaining specialised, emergency-relevant equipment instead of equipment required for combat roles), operations planning (any major disaster response requires deliberate planning and relevant training), ability to communicate and work with local authorities in cases when they are under existential threats and stress. The recent military en-

gements in emergency response operations (including ground, urban, air, and maritime search and rescue) already require country-specific land, naval and air capabilities, planning and training.

At the same time, any serious military preparations to support the civil authorities in emergencies raise scepticism whether this signals a ‘creeping militarism’¹⁴⁰ into the civilian culture and erodes the traditional civil democratic presumption that prevents authorities from using the military in home affairs in a manner, that makes society dependent on them. However, such discussions only demonstrate how important is the nation-specific, so-called disaster sub-culture and tradition. It represents the historical adaptations that societies made in order to cope with disasters. Those nations, that have developed within society self-sufficient capacity to survive in major disasters (including wars) are more prone to rely on civilian-based disaster management than on distanced state agencies; they see the military support as valuable, but mostly in cases of specific incidents (as CBRN threats¹⁴¹) and in providing immediate and large-scale logistic support (sheltering, transportation, water supply, etc.).

Nations that have less consolidated civilian capacity and have experienced failure in coping with severe disasters usually tend to follow more agency-based approach to disaster management; they view the military as a real asset that has been built on public expenditures and, consequently, has to be used to the maximum of their capacity. Although broadly applying international best practices in building a modern disaster management system, such nations tend to compensate internal civilian deficits by improvising with additional military roles. Therefore, it needs to be emphasised that successful implementation of best practices requires not only gathering comprehensive information for the formal side of other nations’ experience, but also understanding the respective organisational culture.

Obviously, the concepts and policies of using armed forces for civil protection in disasters and manmade incidents vary within the framework presented above, and they have been rapidly evolving since the end of the Cold war. Reflecting this tendency, a 2008 Venice Commission report underlines that, in the case of disaster response and relief operations, there are constitutions that explicitly regulate the use of the military, as those of Germany, Switzerland, and others. In other states, such as Denmark, even in the absence of specific constitutional provisions delineating the military’s role in domestic crisis situations, the Minister of Defence is authorised to instruct the armed forces to provide humanitarian assistance at home. Other legal systems authorise armed forces to take part in mitigating the effects of natural disasters and extraordinary threats to the environment, and to participate in search and rescue missions. Poland, Italy and Spain are among the countries with such legal acts. In the United Kingdom, the armed forces have the same powers and obligations as any citizen, to provide support when the civil power requires assistance in battling a disaster. Finally, some states, such as Spain, have special units within the armed forces to perform these assistance tasks.¹⁴²

As a general trend, modern national security concepts, part of which is disaster management, are expanding not only in scope. There is an obvious tendency of mixing the traditional focus on the attrib-

¹⁴⁰ Siobhan Morrissey, “Should the Military Be Called in for Natural Disasters?” *Time*, 31 December 2008, available at <http://content.time.com/time/nation/article/0,8599,1869089,00.html>.

¹⁴¹ See in this regard the dedicated study Matteo E. Bonfanti and Francesca Capone, “Fostering a Comprehensive Security Approach: An Exploratory Case Study of CBRN Crisis Management Frameworks in Eleven European Countries,” *Information & Security: An International Journal* 33, no. 1 (2015): 55-80, <http://dx.doi.org/10.11610/isij.3303>.

¹⁴² Report on the Democratic Control of the Armed Forces, Adopted by the Venice Commission at its 74th Plenary Session (Venice, 14-15 March 2008).

utes of the state (sovereignty, independence, territorial integrity) with securing the functions that are vital to the society. Achieving a consolidated goal of providing “safety of population, security of society, sovereignty of state,”¹⁴³ requires a set of innovative decisions, including redrafting institutional roles (including those of the military), building a new framework for reinforcing the local authorities by the state, achieving a higher level of interagency collaboration, planning and multiagency operations, implementation of the concept of resilience, and systematic efforts to develop relevant civil security culture.

¹⁴³ On the example of Finland’s *Strategy for Securing the Functions Vital to Society* (2006), available at http://www.defmin.fi/en/publications/strategy_documents/the_strategy_for_securing_the_functions_vital_to_society_2006.

2 Legal framework of using armed forces for domestic disaster response and relief

Provision of support to civilian authorities in natural and manmade disasters is a non-armed mission for the national military. From a societal point view, such support is vital and it should be provided in case of any need. From a legal point of view, the domestic use of armed forces may raise constitutional concerns and debates, depending on the country-specific constitutional paradigm, security culture, and historical experience.¹⁴⁴

The core issues at stake are the principle of non-domestic use of armed forces and the delimitation of jurisdiction among various governmental agencies. By definition, any use of armed forces for domestic civil protection should respect the protection of the democratic fundamental values and political liberties. In practice, the policy of securing society can easily harm the freedom of citizens. Likewise, the priority of liberal democratic traditions can create obstacles to undertaking effective security measures.

In order to overcome these obstacles, some nations have decided to introduce specific texts in basic laws and thus to establish the chain of responsibilities and command in exceptional circumstances, other than war. Other countries have introduced specific parliamentary acts to provide a framework, mandate and decision-making procedures on domestic use of armed forces and the respective operations. Usually, these are emergency management laws, or laws about the status of the national military or, in some cases, the police. In some countries included in the study, such decisions are mandated to the executive power under parliamentary control. No matter what the case is, the norms on using armed forces respect relevant international norms or standards, in particular the principle of democratic control over domestic operations of the military.

2.1 International norms and standards

There are no international regulations addressing specifically the roles of armed forces. Nevertheless, several intergovernmental organisations have adopted documents, which include provisions for or limitations on the role of armed forces in terms of permissible and non-permissible operations.

The most widely recognised source of detailed international norms on missions and roles of armed forces is the OSCE's *Code of Conduct on Politico-Military Aspects of Security*.¹⁴⁵ The Code stipulates that while each State is free to choose its own security arrangements, they must be in accordance

1.1.1.1.1 ¹⁴⁴ See, for example, UK Parliament's *Constitutional arrangements for the use of armed force*, available at www.publications.parliament.uk/pa/ld201314/ldselect/ldconst/46/4606.htm; Elizabeth Ward, *Call Out the Troops: an examination of the legal basis for Australian Defence Force involvement in 'non-defence' matters*, Research Paper 8 1997-98, available at www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/RP9798/98rp08; Scott R. Tkacz, "In Katrina 's Wake: Rethinking the Military's Role in Domestic Emergencies," *William & Mary Bill of Rights Journal* 15, no. 1 (2006), Article 11, available at <http://scholarship.law.wm.edu/wmborj/vol15/iss1/11>.

¹⁴⁵ *Code of Conduct on Politico-Military Aspects of Security*, DOC.FSC/1/95 (Budapest: Organisation for Security and Co-operation in Europe, 3 December 1994).

with international law and OSCE Commitments (Art. 10). With regard to internal security, the armed forces' missions need to be in conformity with constitutional procedures, under the effective control of constitutional authorities and subject to the rule of law (Art. 36).

In 2005, the Parliamentary Assembly of the Council of Europe adopted *Recommendation 1713/2005* that called upon Council of Europe Member States to adhere to the principles of democratic oversight of the security sector, including intelligence services, police, border guards and the armed forces. With regard to the armed forces, the Recommendation stipulates that, "National security is the armed forces' main duty. This essential function must not be diluted by assigning auxiliary tasks to the armed forces, save in exceptional circumstances."¹⁴⁶

Solidarity is one of the normative, institutional, and psychological pillars of the European Union. In accordance with the Solidarity Clause of the Treaty of Lisbon (2009, Title VII),¹⁴⁷ the Union and its Member States act jointly in the spirit of solidarity if another Member State is a subject of a terrorist attack or a victim of a natural or manmade disaster and, as a result, requests assistance (Art. 188R). First, the Union shall mobilise all the instruments at its disposal, including the military resources made available by the member states. Secondly, the other member states shall provide assistance upon the request of the political authorities of a Member State. Thus, the obligation for mutual assistance is one of the engines of the collective security within the Union and its Common Foreign and Security Policy. In accordance with this obligation, any member country not only has the opportunity to receive aid and assistance in case of a serious security threat or emergency, but also should take obligations to establish capabilities to provide and receive assistance. The EU's Crisis Co-ordination Arrangements (CCA) have been designed for situations in which a crisis is so far-reaching or politically significant that, to manage it, the co-ordination of EU measures is required and the regular decision-making procedures of the Council cannot be employed, for example due to time pressure.¹⁴⁸ The CCA guarantee the EU's joint situational picture and determine how the EU bodies and Member States co-operate in a situation where two or more Member States face a disaster or an emergency situation (including terrorism-related situations). The presidency of the EU activates the coordination mechanisms after negotiating with the Member State(s) involved. Being the contact point for the Crisis Co-ordination Arrangements, concrete measures are taken by the Situation Centre (SitCen) of the Council.¹⁴⁹

NATO has established procedures for Cooperation for Disaster Assistance in Peacetime since 1953, applicable only between the member countries.¹⁵⁰ In December 1992, the North Atlantic Council agreed that, upon a request to provide disaster assistance by a relevant international organisation, NATO should be ready to employ these procedures also in case of a disaster outside NATO's bounda-

¹⁴⁶ Parliamentary Assembly of the European Union, *Democratic Oversight of the Armed Forces of the Member States* (Recommendation 1713 (2005), available at <http://www.assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17360&lang=en>).

¹⁴⁷ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2007:306:FULL&from=EN>.

¹⁴⁸ European Council, *EU emergency and crisis co-ordination arrangements*, available at <https://www.consilium.europa.eu/uedocs/cmsUpload/WEB15106.pdf>.

¹⁴⁹ *EU emergency and crisis co-ordination arrangements*, 15106/05, Limite, CAB 48, JAI 469, PROCIV 194, available at <http://consilium.europa.eu/uedocs/cmsUpload/WEB15106.pdf>.

¹⁵⁰ NATO Civil Emergency Planning, *NATO's Role in Disaster Assistance* (Euro-Atlantic Disaster Response Coordination Centre, 2001), available at <http://www.nato.int/eadrcc/mcda-e.pdf>.

ries. Consequently, the NATO Policy on Disaster Assistance in Peacetime was revised, and the following modalities for assistance to NATO-member countries have been agreed:¹⁵¹

- If a country outside the Alliance requires assistance, arrangements normally would be a matter between the assisting member country and the stricken country. However, the assisting member country, having obtained information on the requirements of the stricken country, should communicate this information and information on the assistance given to the member countries and the Secretary General through the Alliance-wide communications systems;
- Similarly, an international organisation acting with the consent of a stricken country outside the Alliance may contact the Secretary General requesting assistance. In such cases the Secretary General will activate the necessary elements of the International Staff to take steps to urgently promote the necessary assistance. The Civil Emergency Planning (CEP) of NATO also aims to support the core functions of the Alliance.

In addition to the Oslo Guidelines, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) provides an extensive reference guide for members of UNDAC teams before and during a mission to a disaster or emergency that presents, *inter alia*, principles and mechanisms of coordination of military and civilian assets.¹⁵²

2.2 Constitutionally determined disaster response and relief missions of the military

Throughout the countries under review, there are different forms of constitutional arrangements of military engagements in domestic disaster response. Some—Germany, Italy, Poland, The Netherlands, Austria and others—regulate the overall internal security and protection roles of the military.

However, the examples bellow illustrate that other constitutions directly prescribe some supporting disaster management roles to the military and even determine the types and scale of disasters in the response to which they might be engaged. In some cases, the constitutional courts (or relevant institutions) have made decisions that expand or clarify the range on military domestic arrangements.

Examples:

- The Constitution (The Basic Law) of Germany and its interpretations in the last decade are illustrative of the recent trend towards expansion of the domestic roles of the military. It provides regulations on how assistance to the local authorities during disasters shall be provided. Article 35 (2) stipulates that “in order to respond to a grave accident or a natural disaster, a *Land* may call for the assistance of Police Forces of other *Länder* or of personnel and facilities of other administrative authorities, of the Armed Forces, or of the Federal Border Police.” The same article, paragraph (3) is even more concrete, determining that “If the *natural disaster* or accident endangers the territory of more than one *Land*, the Federal Government, insofar as is necessary to combat the danger, may instruct the Land governments to place police forces at the disposal of other *Länder*, and may deploy units of the Federal Border Police or the *Armed Forces* to support the police. In this context, the measures taken by the

¹⁵¹ NATO Civil Emergency Planning, *NATO’s Role in Disaster Assistance*, Second edition (Brussels: Euro-Atlantic Disaster Response Coordination Centre, 2001).

¹⁵² See section D.5 “Civil Military Coordination” in the UNDAC Field Handbook, 6th edition (UN Office for the Coordination of Humanitarian Affairs, 2013).

Federal Government shall be rescinded at any time at the demand of the *Bundesrat*, and in any event as soon as the danger is removed.”¹⁵³ The further interpretation of this article and its overall paradigm illustrates the observation made earlier in this report that under the pressure of the on-going expansion of unexpected threats and growing number of disasters of natural and manmade origin the nations and their judiciary elites are willing to emancipate from the Twentieth century legal frameworks and expand the use of national military. According to Justus Leicht, in 2012, six years after ruling that the use of the military for domestic purposes was unconstitutional, the Supreme Court has allowed the use of weapons during army deployments inside Germany. The court interpreted Art. 35 (quoted above) to permit the armed forces to intervene in any case involving “damage of catastrophic dimensions.”¹⁵⁴

- In Poland, the Constitution determines the role of the armed forces in a ‘conservative’ manner: “The Armed Forces of the Republic of Poland shall safeguard the independence and territorial integrity of the State, and shall ensure the security and inviolability of its borders” (Art. 26, 1).¹⁵⁵ However, the Constitutional Court (*Trybunał Konstytucyjny*) in 2000 has decided that such definition does not exclude that the armed forces may have important role for the internal security, “although their involvement here might turn out to be of an auxiliary character.”¹⁵⁶ Article 3(1a) of the Defence Act, added in 1997, stipulates that the armed forces may take part in combatting the effects of natural disasters and extraordinary threats to the environment, and in search and rescue missions.¹⁵⁷ Further, the Statute on the Deployment of Polish Armed Forces Abroad permits the forces to take part in rescue, search and humanitarian missions.¹⁵⁸
- Italy follows a policy of comprehensive use of armed forces and Carabinieri for domestic security and protection purposes. The basic law stipulates just that “[t]he defence of the country is a sacred duty for every citizen.”¹⁵⁹ The armed forces are expected to guarantee their support to the national civil protection service in all emergencies. The military is ready to intervene in cases of disaster, always under military command, but under the overall responsibility and coordination of the civilian authority in charge of the rescue operations. For that reason, a number of military personnel are permanently deployed within the Department of Civil Protection. They are responsible for planning and operations in specific fields such as air operations in case of forest fires and maritime operations in case of emergencies at sea.
- As in Poland and Italy, the Constitution of The Netherlands defines the armed forces roles so broadly that the text hardly places any limitations on the use of the military: Article 97 declares that “1. There shall be armed forces for the defence and protection of the interests of

¹⁵³ Basic Law of the Federal Republic of Germany, as of October 2010 (Italics added by the authors).

¹⁵⁴ Justus Leicht, German Constitutional Court legalizes use of army inside Germany, 22 August 2012; and German army's crisis role widened, *BBC News Europe*, 17 August 2012.

¹⁵⁵ The Constitution of the Republic of Poland of 2nd April 1997, *Dziennik Ustaw* No. 78, item 483.

¹⁵⁶ *Trybunał Konstytucyjny*, Judgement NoK26/98 of March 2000, quoted by Georg Nolte and Heike Krieger, “European Military Law Systems: General Comparative Report,” in Georg Nolte, ed., *European Military Law Systems* (Berlin: De Gruyter Recht, 2003), p. 34.

¹⁵⁷ *Ibid.*, p. 37.

¹⁵⁸ *Ibid.*, p. 38.

¹⁵⁹ Constitution of the Italian Republic (Roma: Senato della Repubblica, n.a), Art. 52.

the Kingdom, and in order to maintain and promote the international legal order.”¹⁶⁰ Based on this legal set-up, it is the Minister of Defence who, elaborating the constitutional text, sets out the main tasks of the Dutch armed forces in the following way:¹⁶¹

- Protecting Dutch and Allied territory, including the Caribbean parts of the Kingdom;
- Promoting stability and the international rule of law;
- Supporting civil authorities in upholding the law and providing disaster relief and humanitarian assistance, both nationally and internationally.

According to the Defence Doctrine, “this list is not hierarchical: the tasks are equal and must be executable at all times. The likelihood that a certain task will need to be executed may vary considerably over time.”¹⁶² Within such a legal framework, the Dutch armed forces have a comprehensive role in the national civil protection policy and operations in cases of shortfalls in the capacities of civil organisations. The core military domestic operations include emergency relief, search and rescue, along with security and enforcement of public order. The Defence Doctrine explains that “In doing so, the armed forces have developed into a structural security partner to the police, fire service and medical services in accidents and disasters. In principle, the whole of the armed forces is available for this third main task, which also includes a number of routine activities, such as explosive ordnance disposal, coastguard operations in the North Sea, ...” (Art. 3.4.3). The core principle in providing military assistance to the civilian authorities in cases of natural and manmade disasters is that it always has to be a civil authority’s request for support (usually, by the chairperson of the security region), addressed to the key horizontal emergency co-ordinator – the Minister of Security and Justice, who will then investigate the way the support shall be provided. If there is no other civil agency available and capable to provide the required support, then it could be addressed to the Minister of Defence and the CHOD can then act on the Minister’s behalf in deciding whether to provide military assistance (Art. 3.5.2).

- The Austrian Federal Constitution subscribes to the concept of “universal national defence. Its task is to preserve the Federal territory’s outside independence as well as its inviolability and its unity, especially as regards the maintenance and defence of permanent neutrality.”¹⁶³ The military defence of Austria is conducted on the principles of a militia system, while in addition to the typical defence mission the federal military are obliged “to render assistance in the case of natural catastrophes and disasters of exceptional magnitude.”¹⁶⁴ The same article, paragraph 5, provides opportunity for the military, acting on a decision the Minister of Defence (as determined in the Defence Law), to undertake interventions on its own initiative for the purposes of civil protection against natural and other disasters and catastrophes. Such interventions are “... admissible only if circumstances outside their control have put it beyond capacity of the competent officials to effect intervention by the

¹⁶⁰ See the English language translation of the Constitution of the Kingdom of the Netherlands 2008, available at www.legislationline.org/documents/section/constitutions/country/12.

¹⁶¹ See, for example, *In the interest of the Netherlands* (The Netherlands’ Ministry of Defence, October 2013), p. 12.

¹⁶² Netherlands Defence Doctrine (The Hague: Ministerie van Defensie, 2013), available in English at <http://www.defensie.nl/documenten/publicaties/2013/11/20/defence-doctrine-en>.

¹⁶³ Federal Constitutional Law, Art. 9a(1). See Austrian Federal Constitutional Laws (selection), p. 10.

¹⁶⁴ *Ibid.*, Art. 79, para. 2.

military and irreparable damage [for] the community at large would arise from a further wait...” (Art. 79, para. 5).¹⁶⁵ Under these constitutional arrangements of the internal tasks, the Austrian Armed Forces furthermore have to:

- Protect the constitutionally established institutions and the democratic freedoms of the population;
- Maintain order and security inside the country;
- Render assistance in the case of natural catastrophes and disasters of exceptional magnitude.¹⁶⁶

It can be inferred from these legal arrangements, that the legislator has left the determination of what means ‘exceptional magnitude’ to the executive decision-maker. From a legal point of view, experts like G. Nolte, H. Krieger, H. Prantl, and R. Gaier assume that such lack of clarity may lead to irrelevant use of the armed forces for domestic purposes.¹⁶⁷ However, from the point of view of civil protection policy, such ‘freedom’ provides options for more relevant decisions as the assessment of ‘exceptional magnitude’ is set in a local context: in one area, ‘exceptional’ could be an event with much smaller magnitude than that of another area, but the danger for the people could be similar.

- The Constitution of Croatia provides legal ground for domestic disaster response missions of the armed forces: “In the circumstances provided by Articles 17 and 100 of the Constitution, the armed forces may, if the nature of jeopardy demands so, be used as assistance to police and other governmental bodies.”¹⁶⁸ According to the same article “The armed forces of the Republic of Croatia may also be deployed to assist fire fighting and rescue operations and surveillance and protection of the rights of the Republic of Croatia at sea.”¹⁶⁹ The other related key Croatian legal acts on military roles in cases of disaster response and relief—the *Protection and Rescue Act* and the *Law on Defence*—provide the legal framework reflecting the principle that the military participates in protection and rescue activities if called upon by competent authorities, in cases where the available civilian protection and rescue resources are not sufficient. The capacity of the armed forces is seen as supporting, and their operations in protection and rescue should be co-ordinated with the Ministry of Internal Affairs and Administration.¹⁷⁰

2.3 Domestic military missions defined by laws and other acts

In almost all countries subject of this review, the armed forces provide support to the civilian authorities and the population in response to a range of natural and manmade disasters. The arrangements are either expressly permitting (through constitutional provisions, statutes or governmental acts) or not explicitly prohibiting performance of these tasks by the military. The focus of the legal

¹⁶⁵ Ibid., pp. 92-93.

¹⁶⁶ Tasks of the Austrian Armed Forces, Official website of the Austrian Armed Forces at www.bundesheer.at/english/forces/tasks.shtml.

¹⁶⁷ See, for example, Georg Nolte, ed., *European Military Law Systems* (Berlin: Der Gruyter Recht, 2003).

¹⁶⁸ The Constitution of the Republic of Croatia, Art. 7, In: The Constitution of the Republic of Croatia (Consolidated text 2001).

¹⁶⁹ See the translation on the website of the Croatian Parliament, at www.sabor.hr/Default.aspx?art=2407.

¹⁷⁰ *Protection and Rescue Act*, Art. 8, available in Croatian at <http://www.duzs.hr/page.aspx?PageID=604>.

acts is usually on manmade and natural disasters, including biological disasters. The type of activities of the armed forces in case of disasters can be relief operations in cases of natural disaster and humanitarian catastrophes, or assistance in case of biological disasters.

From a legal point of view, the armed forces are part of the executive structures of the state. Respectively, the roles of armed forces in safeguarding national security and defence are decided either through constitutional arrangements, by specific laws (commonly laws on defence, on the armed forces, or on emergency management/ disaster protection act) or by executive decisions.

In most of the countries under review, the constitutional arrangements on deploying the armed forces are relatively frugal. In practice, such arrangements actually provide a wide range of opportunities to the members of parliaments to regulate the domestic use of armed forces for everything they view as important and relevant. These regulations could be in the form of specific defence or emergency laws, parliamentary decisions, or approval of executive documents such as security strategy, military strategy, crisis management concept, or defence (military) doctrine. Any parliamentary decision should be in line with the constitution and, obviously, not be challenged by the Constitutional Court. As the legal experts Nolte and Krieger explain, in such legal environment it is less clear whether a law or another Parliamentary act is in accordance with the constitution, which may provoke “significant and very diverse debate” on the limits of employing the of military, militarisation of societies, the spirit of the constitution, respect of democratic freedoms, etc.¹⁷¹

Examples of evolving roles of the armed forces in the domestic affairs and emergencies illustrate this statement:

- In France, no pertinent constitutional or parliamentary act determines the role of the national military in domestic affairs. However, the Defence White Paper (issued by the President in 2013) declares, “[t]he engagement of the armed forces to support homeland security and civil security in the event of a major crisis could involve up to 10,000 personnel from the land forces, together with appropriate resources provided by the navy and the air force.”¹⁷² The White Paper also determines the National Gendarmerie, as an armed force under the operational control of the Ministry of Interior, to be able to “... respond rapidly to crisis situations or natural disasters, and it can therefore be deployed alongside the armed forces.”¹⁷³ As a recent development in France, the national-level of domestic crisis management is consolidated in the General Secretariat for Defence and National Security and the Inter-ministerial Crisis Centre (under the leadership of the Prime-Minister). Providing thus civilian and political control, the armed forces will act in a crisis situation at the request of the civilian authority, under military command, to support or supplement the internal security forces (police and gendarmerie, fire brigade and civilian security organisations).¹⁷⁴
- In Denmark, there are no specific constitutional provisions to delineate the military’s role in domestic crisis situations. Article 7 of the Defence Act, however, stipulates that “the Defence Forces, according to the specified decision of the Minister of Defence and after negotiations

¹⁷¹ Georg Nolte and Heike Krieger, “European Military Law Systems: General Comparative Report,” in Georg Nolte, ed., *European Military Law Systems* (Berlin: De Gruyter Recht, 2003).

¹⁷² *French White Paper on Defence and National Security*, foreword by François Hollande, President of the French Republic (2013), p. 86.

¹⁷³ *Ibid.*, p. 92.

¹⁷⁴ *Ibid.*, p. 104.

with other ministers involved, be allowed to undertake other tasks.”¹⁷⁵ Thus, the military can support the Police and the Danish Emergency Management Agency if a serious accident or a catastrophe strikes Denmark.¹⁷⁶ This article introduces the interpretation that despite the existence of particularly explained tasks,¹⁷⁷ under direct executive decision the armed forces may take action within the domestic civil protection domain. The Danish concept of ‘total defence’ actually means *collective emergency preparedness* with the aim “to ensure an efficient and coordinated effort by its combined resources in connection with crises, catastrophes, or other major incidents. The purpose is to maintain vital public functions and to protect the lives and properties of the population.”¹⁷⁸ This means that the Minister of Defence is authorised to develop and use military capabilities in order to reduce the civil society’s vulnerability and to increase its robustness so that society is more able to resist potential new challenges and risks. The capacities for emergency management, including those of the Defence Forces, are expected therefore to be continuously adjusted in keeping up with societal developments. This allows the Minister of Defence to determine tasks of the Ministry of Defence, in addition to the once defined by Law, as the following:

- Monitoring of maritime traffic and maritime environment;
 - Rescue services and handling of pollution at sea;
 - Assistance to the police;
 - Assistance to fire and rescue services at both national and municipal levels.¹⁷⁹
- Likewise, in Belgium no constitutional or other legal prescriptions exist in relation to the provision of military support to civil authorities in domestic emergencies, but the armed forces might be used in exceptional cases when civilian capacity is not sufficient. According to the Ministerial Circular NPU-1 of 26 October 2006, whenever civilian means are exhausted, military support can be considered and requested through the competent authority. In case of a municipal level of emergency, an agreement by the governor is compulsory.¹⁸⁰
 - The language of Spain’s Constitution of 1978¹⁸¹ clearly distinguishes the armed forces from the forces of public order, i.e. the Civil Guard and the Police, which had been treated as part of the armed forces under the applicable organic law of the Franco regime. Article 8 of the democratic constitution states that “1. The Armed Forces, consisting of the army, the navy, and the air force, have as their mission the guarantee of the sovereignty and independence

¹⁷⁵ Jørgen Albræk Jensen, “Military Law in Denmark,” in Georg Nolte, ed., *European Military Law Systems*, p. 239.

¹⁷⁶ *Fact and Figures about the Danish Armed Forces* (Copenhagen: Ministry of Defence, February 2011), p. 5.

¹⁷⁷ The Defence Act of 2011 defines the purpose of the Danish armed forces as follows: to prevent conflicts and war; to uphold Denmark’s sovereignty and protect the nation’s continued existence and integrity; and to promote peaceful development in the world with respect for human rights. *Ibid.*, p. 3.

¹⁷⁸ Collective emergency preparedness, Copenhagen: Ministry of Defence, last update 5 January 2015, available at <http://www.fmn.dk/eng/allabout/Pages/Collectiveemergencypreparedness.aspx>.

¹⁷⁹ Responsibilities of the ministry, Copenhagen: Ministry of Defence, last update 16 January 2015, available at <http://www.fmn.dk/eng/Aboutus/organisation/Pages/Responsibilitiesoftheambit.aspx>.

¹⁸⁰ European Commission, “Belgium - Emergency planning,” in *Vademecum – Civil protection*, available at http://ec.europa.eu/echo/files/civil_protection/vademecum/be/2-be-2.html.

¹⁸¹ Constitution passed by the Cortes Generales in plenary meetings of the Congress of Deputies and the Senate, and ratified by referendum of the Spanish people in 1978.

of Spain, the defence of its territorial integrity, and the constitutional order.”¹⁸² Article 30 provides ground for co-operation between the military and the civil protection system in cases of natural and manmade disasters. It stipulates that citizens have the right and the duty to ‘defend Spain’ through a military or civilian service, and further that the “duties of citizens in the event of serious risk, catastrophe or public calamity may be regulated by law.”¹⁸³ In response to the new constitutional requirements, the 1980 *Organic Act on National Defence* stipulated that the Government shall arrange the contribution of whatever kind of resource that is necessary (human, material, etc., public or private), defined the concept of *civil defence*, and stated that the Armed Forces will cooperate at the request of civil authorities. An amendment of the same act in 1984 introduced the concept of *civil protection* and thus integrated the wartime civil defence with the peacetime civil protection functions. In this line of developments, a Royal Decree of 1996 established a new structure of the Ministry of Defence and defined the functions of the Defence Policy Directorate in relation to civil preparedness, civil emergency planning and the armed forces contribution to disaster relief operations. As a result, the role of the Spanish military for the civil protection has grown significantly not only from legal, but also from operational point of view. The establishment of special military formation (see Chapter 3.2) for provision of support to the civilian authorities in cases of emergencies has been the next step in the same direction. However, since 1984 legal regulations have been introduced to place decision making on domestic emergencies under full civilian control and to make the military only an operational body.

- In the Swedish Constitution, the national military is treated as “an instrument of the Government”¹⁸⁴ serving the purpose of “the defence of the Kingdom” and states that “The Government may deploy the armed forces of the Realm in accordance with international law to meet an armed attack against the Realm or to prevent a violation of its territory.”¹⁸⁵ However, as this statement relates more to the “external defence” and is linked to the Art. 51 of the UN Charter, an important role for determining the internal mission of the armed forces in support to the civil authorities in cases of emergencies is provided by the *Ordinance on Logistic and Material Support of the Armed Forces to Civil Authorities*.¹⁸⁶
- Finland’s Ministry of Defence and the Armed Forces’ role in disaster response and relief has been legally designated as the function of “supporting the other authorities.” According to the Government’s 2010 *Security Strategy for Society*, “these functions comprise executive assistance, participation in disaster response and support to an authority in providing assistance to another state.”¹⁸⁷ The Strategy requires that the armed forces develop and maintain readiness to provide support to the civilian authorities with the following key capabilities:
 - “Area surveillance capability;
 - Field communication systems;

¹⁸² Ibid. Section 8.

¹⁸³ Ibid., Section 30.

¹⁸⁴ The Swedish Constitution consists of four fundamental laws: the Instrument of Government, the Act of Succession, the Freedom of the Press Act, and the Fundamental Law on Freedom of Expression.

¹⁸⁵ The Instrument of Government, Chapter 15. War and Danger of War, Art. 13.

¹⁸⁶ See, for example, Kim Eduard Lioe, *Armed Forces in Law Enforcement Operations? The German and European Perspective* (Heidelberg: Springer, 2011), p. 114.

¹⁸⁷ Security Strategy for Society, Government Resolution 16.12.2010, p. 28.

- Search and oil spill recovery readiness on land and at sea;
 - Intelligence, analysis and decontamination of CBRNE;
 - Fire fighting;
 - Rescue and clearing;
 - Clearing of explosives;
 - Building of temporary bridges and roads;
 - First aid and evacuation;
 - Land, sea and air transports;
 - SAR by helicopters;
 - Guarding duties;
 - Accommodation and maintenance services; and
 - Expert assistance.”¹⁸⁸
- In the UK, the military tasking is determined at the doctrinal level ¹⁸⁹ under the following four generic headings: “Standing Home Commitments,” “Standing Strategic,” “Standing Overseas Commitments,” and “Contingent Operations Overseas.” The Standing Home Commitments tasks encompass the inter-department efforts to provide security and sovereignty at home. The military role in these efforts in regard to domestic security, or “Standing Home Commitments,” encompasses four military tasks, including “MT 2.1: *Military Aid to Civil Authorities*”:

Military Aid to Civil Authorities (MACA) covers the provision of military support to the civil power, OGDs (Other Government Departments) and the community at large. This support is provided on an emergency basis and fielded from irreducible spare capacity. Specialist capabilities are provided when requested by OGDs, including routine Explosive Ordnance Disposal (EOD), partially funded by the Home Office, and a major contribution to the Search and Rescue (SAR) cover for the UK. It also includes support to the maintenance of Government in times of crisis and conflict.¹⁹⁰

Defence contributes to the UK resilience through the provision of a number of guaranteed niche capabilities and a process of augmenting civil authorities and structures when civilian capacity is overwhelmed. The Ministry of Defence augments the capacity of civilian agencies responding to specific requests for a planned response or to a crisis. This means that augmentation by the military is not guaranteed and depends on the complex assessment of a concrete situation. MACA is subdivided into Military Aid to the Civil Community, Military Aid to the Civil Power and Military Aid to other Government Departments. In practice, military capabilities, generated for the implementation of other domestic military tasks as *Integrity of UK Waters* and *Integrity of UK Space* are routinely employed in support of the local civil authorities.

- The Irish Defence Forces have the role of aiding the Civil Power, which in practice means to assist, when requested, An Garda Síochána [the police force of Ireland], who have primary

¹⁸⁸ Ibid., article 2.4.2 ‘Strategic Tasks,’ p. 28.

¹⁸⁹ Operations in the UK: The Defence Contribution to Resilience, Joint Doctrine Publication 02, Second edition (September 2007), p. 1-4.

¹⁹⁰ Ibid., article 111, p. 1-5. The other three tasks are Military Aid to the Civil Power in Northern Ireland; Integrity of UK Waters; and Integrity of UK Airspace.

responsibility for maintaining law and order, including the protection of the internal security of the State.¹⁹¹ They also participate in multinational peace support, crisis management and humanitarian relief operations in support of the United Nations. From time to time, the Irish Defence Forces may be tasked to conduct search and rescue; air ambulance service; assistance on the occasion of natural or other disasters; assistance in connection with the maintenance of essential services; assistance in combating oil pollution at sea.¹⁹² For example, in response to the 2004 Indian Ocean Tsunami, from January till March 2005 the Defence Forces deployed a team of specialist logistic officers to the United Nations Joint Logistics Centre in Sri Lanka and performed tasks in relation to road and transport assessments, gathering, compiling and disseminating information for all UN Agencies, foreign military and international non-governmental organisations.¹⁹³

- The Kingdom of Norway's Constitution does not specify internal roles of the armed forces. According to Article 25 of the Constitution, the control of the armed forces is among the King's prerogatives, in principle meaning that the Parliament (*Stortinget*) may not give directions as to how this authority shall be exercised. This power is in practice exercised by the Government and, within the Government, by the Minister of Defence. However, since the introduction of the principle of parliamentarism in 1884 (implying that the Government is depending on the continuing support of the Parliament), the Defence Minister is constitutionally and politically responsible to the Parliament for all activities carried out by the Ministry, by the armed forces as a whole and by other subordinated departments. Furthermore, the Government needs the authorisation of the Parliament to pass any new acts regarding the armed forces, as well as for the defence budget. The loose formulation of the purpose of the armed forces to defend Norwegian territory, people and interests provides a room for flexible interpretation.¹⁹⁴ Consequently, the main principle for crisis management is *the principle of responsibility*, which states that each ministry and government agency has a responsibility for internal security within its own field. In order to prevent unhealthy competition or gaps in assigned responsibility, the Ministry of Justice and Police provides horizontal co-ordination through the Directorate of Civil Protection and Emergency Planning. Norway's core emergency management organisation – the Civil Defence—is subordinated to the Ministry of Justice and the Police. Its current purpose is mainly to provide support activities in civil emergencies during peacetime, whereas previously its most important task was to protect against the dangers of war. Norway has no paramilitary or internal security forces. However, the Civil Defence personnel are uniformed and under the protection of relevant Geneva Conventions. The core tasks of the Norwegian military are to provide military defence and contribute to international peacekeeping missions. One of the nine tasks of the military, elaborated in the long-term defence plan,¹⁹⁵ is to “contribute to the safeguarding of public safety and other

¹⁹¹ Defence Forces: Information Handbook (Dublin: Human Resource Management Section, Defence Force Headquarters, January 2011).

¹⁹² Ibid. p. 14.

¹⁹³ Defence Forces Annual Report 2005 (Defence Forces Ireland, 2006).

¹⁹⁴ *Questionnaire on the Code of Conduct on Politico-Military Aspects of Security*, Permanent Delegation of Norway to OSCE, FSC.EMI/77/14 (15 April 2014).

¹⁹⁵ A Defence for our time, White Paper (2011-2012), presented to the Norwegian parliament 23 March 2012. Quoted by Nina Græger, “‘Forces for good’ to ‘forces for status’? Small State Status Seeking,” in Benjamin

central social tasks.”¹⁹⁶ The long-term defence plan also requires that “the size and equipment of individual elements shall take into account the requirement to provide support to the civil community.”¹⁹⁷ In this context, an extensive civil-military co-operation has been established between the Ministry of Defence and the Directorate of Civil Protection and Emergency Planning within the Ministry of Justice and the Police.

- The Romanian Armed Forces’ mission is “to guarantee the state sovereignty, independence and unity, territorial integrity and constitutional democracy.”¹⁹⁸ Their contribution to the national disaster response and relief preparations is based on deliberate and contingency plans that are co-ordinated by the civil emergency management authorities (under the control of the Minister of the Interior). The implementation of those plans and all necessary rapid reaction measures is organised and commanded by the Chief of the General Staff under the leadership of the Minister of Defence. All direct military engagements are co-ordinated with the Governmental Commission for Disaster Relief.
- Similarly to the Romanian case, the Constitution of Bulgaria determines a ‘classical’ role of the armed forces: “The armed forces shall guarantee the sovereignty, security and independence of the country and shall defend its territorial integrity.”¹⁹⁹ The Law on Defence and Armed Forces adds to defence and defence preparedness activities “... 9. Maintaining and using armed forces in disasters; 10. Participation in containing and/or mitigating the consequences of disasters.”²⁰⁰ The White Paper of Defence of 2010, as well as previous versions, elaborates a third mission of the armed forces “Contribution to the national security in peacetime,” that includes “maintaining capabilities of early warning for potential risks and threats; activities for control of the air and maritime space; operations for containing and neutralising terrorist, extremist and crime groups; protection of strategic sites; protection and support to the population in natural disasters, accidents, and environmental catastrophes; neutralising unexploded ordnance; provision of humanitarian assistance; contribution to migration control; rescue and evacuation activities; assistance, when necessary, to other state bodies, organisations, and local authorities, for preventing and overcoming the consequences of terrorist attacks, natural disasters, ecological and industrial catastrophes, and dangerous dissemination of infectious diseases.”²⁰¹ From policy point of view, the involvement of military capabilities and assets is formally seen as last resort, only in cases when the available civilian capacity is overwhelmed. In practice, however, the military are called to support disaster response fairly often, e.g. for aerial surveillance and reconnaissance, search and rescue from the air, provision of heavy transport vehicles in snow storms and heavy icing, etc.

de Carvalho and Iver B Neumann, eds., *Small State Status Seeking: Norway's Quest for International Standing* (Abingdon, UK: Routledge, 2015), pp. 85-107.

¹⁹⁶ Norwegian Ministry of Defence, *Norwegian Defence 2013. Facts and Figures*.

¹⁹⁷ Ibid, p. 4.

¹⁹⁸ Constitution of the Republic of Romania, Art. 117 (1), available at www.cdep.ro/pls/dic/site.page?id=371.

¹⁹⁹ Constitution of the Republic of Bulgaria, 1991, Art. 9, available at <http://www.parliament.bg/en/const>.

²⁰⁰ Law on Defence and the Armed Forces of the Republic of Bulgaria, Article 6(2).

²⁰¹ White paper on Defence and the Armed Forces of the Republic of Bulgaria, 2010, pp. 21-22, available at http://mod.bg/bg/doc/drugi/20101130_WP_BG.pdf.

- According to the *Armed Forces Law* (2002), the Slovak military may be tasked to provide support to civilian authorities in emergency situations and in cases of introduction of state of emergency, to perform air search and rescue operations, and to provide air medical transport.²⁰²
- Although the system of protection against natural and other disasters in Slovenia is separated from the defence system and is non-military in nature, the Slovenian armed forces can also participate in protection, rescue and relief tasks in cases, where available civilian forces and resources are insufficient. Among the examples is the participation of the airborne unit with helicopters in mountain rescue operations and the contribution to fighting forest fires. The participation of the armed forces has to be approved by the Minister of Defence on the initiative of the Civil Protection Commander of the Republic of Slovenia.²⁰³
- The Constitution of the Czech Republic stipulates that the government shall decide on dispatching Czech military forces outside the territory of the Czech Republic for “... c) participation in rescue operations in case of natural, industrial and ecological disasters,”²⁰⁴ but does not regulate the internal use of the armed forces for similar purposes. However, since the basic law does not constrain the use of the military in such cases, the *Military Strategy of the Czech Republic* (2012) determines the mission of the military in support of the civil authorities in emergency situations in the following manner: “The Armed Forces of the Czech Republic may support national civilian authorities on the state’s territory in the framework of the Integrated Rescue System (IRS), particularly in the consequence management of large-scale natural disasters and industrial or environmental incidents. In cases when the internal security and security of citizens are under serious threat, the Ministry of Defence may assign forces and assets in order to support and reinforce the Police of the Czech Republic (PCR). To that effect, forces are assigned to the extent necessary and subject to their availability. In principle, the entirety of the Armed Forces of the Czech Republic, including the Armed Forces’ Active Reserve Force, may be used in support of the IRS and PCR.”²⁰⁵
- In Estonia, the *Estonian Defence Forces Organisation Act* (2009) determines one of the functions of the Defence Forces as “... 4) participation in the resolution of a state of emergency and an emergency situation and the ensuring of the security on the bases of and pursuant to the procedure provided by law.”²⁰⁶ The Law also explicitly states that such assistance could be provided only if the police forces are not able to operate or their capacity is insufficient. The internal military mission of support should be performed without using direct coercion in any form.²⁰⁷

²⁰² Law on the Armed Forces of the Republic of Slovenia, 23 May 2002, Article 4(4).

²⁰³ European Commission, “Slovenia - Disaster management structure,” in *Vademecum – Civil protection*, available at http://ec.europa.eu/echo/files/civil_protection/vademecum/si/2-si-1.html#stak.

²⁰⁴ Constitution of the Czech Republic (16 December 1992), Art. 43(4)c.

²⁰⁵ The Defence Strategy of the Czech Republic: A Responsible State and a Reliable Ally, Prague: 2012, Art. 28, p. 9.

²⁰⁶ Estonian Defence Forces Organisation Act, passed 19 June 2008, Art. 3(1), point 4.

²⁰⁷ Ibid., Article 3(4).

- The legal arrangements on the domestic use of the armed forces of Latvia are defined by the *National Armed Forces Law* (1999).²⁰⁸ Accordingly, the national Armed Forces should provide support to “[...] 2) the system of civil protection – in preventive and reactive measures, in measures for the elimination of consequences caused by emergency situations, as well as rescue and search operations.”²⁰⁹ Another article of the Law provides details on the military ‘measures’ that might be undertaken by the armed forces in the following way: “[...] 3) destroy explosive devices; 4) perform coast guard functions, co-ordinate and perform human search and rescue operations at sea, eliminate the effects of accidents occurred at sea, participate in ecological surveillance and control of the navigation regime.”²¹⁰ And at the ‘highest’ level, one of fundamental tasks of the armed forces is determined as “the participation in the prevention of situations that constitute a threat to the State in accordance with the procedures specified in regulatory enactments.”²¹¹ Paragraph 2 of the same article makes an open statement that “[...] the units (sub-units) of the National Armed Forces may become involved in the performance of other tasks not provided for in this Law by an order of the Cabinet.”²¹²
- In Lithuania, the *Law on the Organisation of the National Defence System and Military Service* stipulates that “1. The principal tasks of the Army in peacetime shall be: [...] in the cases specified by the law, provide assistance to other state and municipal institutions.”²¹³ In the elaboration of functions of the paramilitary volunteer force, the Law determines one other function as, “training of volunteer servicemen, preparation of elements of the Volunteer Forces for defence within their own territory and for the performance of joint defence tasks, protection of the defence infrastructure and strategic objects, assistance in the event of natural disasters and calamities.”²¹⁴
- In Portugal, the key civil protection role is dedicated to the National Republican Guard (NRG) – a formation with military status and organisation (similar to Carabinieri and Gendarmerie), which operates under the Minister of Interior’s control in any situation except war or military crisis. Among others, one of the NRG’s principal missions is to “aid and protect the citizens as well as defend and preserve the goods which are found to be in a dangerous situation, due to causes originating from human actions or acts of nature.”²¹⁵ Performing this mission, civilian organisations and the military cooperate in the following areas:
 - Forest fire-related activities (prevention, fire-fighting support and post-fire activities);
 - Reinforcement of civil personnel in health and medical emergencies;
 - Search and rescue;

²⁰⁸ National Armed Forces Law, Latvia, 1999, available at http://vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/National_Armed_Forces_Law.doc.

²⁰⁹ Ibid., Section 6¹, para. 7, point 2.

²¹⁰ Ibid., Section 6¹, para. 1, points 3 and 4.

²¹¹ Ibid., Section 6, para. 1, point 3.

²¹² Ibid., Section 6, para. 2.

²¹³ Law on the Organisation of the National Defence System and Military Service, Republic of Lithuania, Art. 12(1), point 3.

²¹⁴ Ibid., Art. 17, para. 4.

²¹⁵ Guarda Nacional Republicana (Portugal), available at http://gnr.pt/default.asp?do=t04/14tn0vCnpn1/14tn0vCnpn1_v0t_0n6v10nyt7n4qn.

- Logistical support for operations;
- Infrastructure rehabilitation;
- Terrestrial, aerial and maritime reconnaissance activities.²¹⁶

In terms of organisation, the NRG is built into three hierarchical levels, with 20 district commands, 128 detachments and 534 units. It has also a reserve unit, organised and prepared, among others, for K-9 intervention,²¹⁷ search and rescue, and explosive ordnance disposal and underground security.²¹⁸ The NRG has a total staff of 24,736 military and 1,111 civilians, who carry out their missions throughout 94 percent of the national territory accounting for 53,8 percent of the population.²¹⁹

- Greece and Turkey are between the few countries covered by the study assigning a lesser role of the armed forces in disaster response and relief, as prescribed in legislation. In practice, the military contribution in both countries is essential in a variety of cases, but respective decisions are made ad-hoc, via legal or governmental acts. In the aftermath of the August 1999 earthquake, the Turkish Armed Forces made the decision to form a battalion-size search and rescue unit subordinate to Special Forces Command with the intent to better cope with large-scale natural disasters. The special unit is called 'Natural Disasters Search and Rescue Battalion' (see Chapter 3.2 below). Logistics support in crises is provided through a number of sources, including private logistics providers, non-governmental logistics providers and military logistics support. The Turkish Armed Forces, for example, maintain logistics support coordination centres to ensure timely response in the event of emergencies. During the Lake Van earthquake in 2011, military aircraft were made available for delivering SAR forces and other rescue workers, equipment and aid (e.g., blankets, tents, etc.). Military support is anticipated in all provincial plans for all emergency situations, as foreseen in the relevant regulations.
- In Israel, the Home Front Command operates in various emergency situations, specialising in civilian protection to save lives. In emergencies, this Command operates to its fullest capabilities, using all its resources in order to instruct the civilian population on how to cope with the threats facing Israel. The Home Front Command operates search and rescue missions in Israel and around the world, aiding in rescue and recovery from incidents such as terror attacks, floods, conflagrations, etc.²²⁰

²¹⁶ European Commission, "Portugal - Emergency planning," in *Vademecum – Civil protection*, available at http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt-2.html.

²¹⁷ K-9 is the NRG unit for protection of VIPs (authors' remark on the basis of the NRG page at the website of Europol, <https://www.europol.europa.eu/content/memberpage/portugal-803>).

²¹⁸ Guarda Nacional Republicana, (Portugal), section "Structure and organisation."

²¹⁹ Ibid., "Staff data."

²²⁰ Home Front Command, Israel Defense Forces, available at <http://www.idfblog.com/about-the-idf/idf-units/regional-commands/home-front-command>.

3 Organisation for using armed forces in domestic disaster response and relief

3.1 Models of military employment in disaster response operations

In most countries, disaster response and relief capacities are spread across different agencies and levels – national, regional, and local. Disaster management or civil protection agencies, medical emergency services, firefighting brigades, police forces, armed forces, business emergency units, volunteer organisations and specialised NGOs can contribute capabilities to emergency response depending on the nature of the crisis and their institutional structures and mandate.

Central governments need to be able to scale up emergency response capability to react in a timely manner since many current emergencies are complex, often broader than initially anticipated and with multiple effects. To cope with these challenges, the regions and municipalities need reinforcements to their own capabilities. In many countries, additional national emergency forces are specifically trained and equipped to provide ‘surge’ capacities. Effective co-operation is an issue of legal arrangements, depends also on inter-agency planning, standardised procedures, and interoperability of the equipment and command and control systems.

In all countries in this review, the armed forces play an important role in domestic disaster response and relief, particularly during large-scale natural disasters, industrial catastrophes and incidents related to the spread of specific dangerous agents, e.g. chemical, biological and radiological. Due to their special expertise, equipment and high operational readiness, they might be called upon in the first line of responders or to reinforce the core civilian forces.

The experience in disaster response and relief of the countries under review is quite comprehensive and bounded with variety of different political, institutional, operational, etc. factors. Some researchers find controversy in the very use of armed forces for civil protection, asking to what extent the military engagement in domestic civil affairs is appropriate.²²¹ Obviously, the practice of an individual country on the use of the military is affected by a combination of normative dynamics and specific interests, positioning it distinctly along the civilian-military power continuum or civil-military relations.

The following typology of the employment of military units and assets in cases of domestic natural and manmade disasters is based on the UK document *Operations in The UK: The Defence Contribution to Resilience*,²²² reflecting also the legal arrangement and military doctrinal documents of reviewed countries:

²²¹ See, for instance, David Etkin, Kenneth McBey, and Cliff Trollope, “The Military and Disaster Management: A Canadian Perspective on the Issue,” n.d., available at www.crhnet.ca/sites/default/files/library/Etkin.pdf.

²²² The Development, Concepts and Doctrine Centre, *Operations in The UK: The Defence Contribution to Resilience*, Joint Doctrine Publication 02 (JDP 02) (Shrivenham: Ministry of Defence, 2007), available at <http://www.army.mod.uk/documents/general/jdp02ed2.pdf>.

- *Military augmentation of civil authorities and forces.* This is a model where military has a supporting role. It is applicable when the country has a well-established multilevel (usually – national, regional and local) disaster response system with relatively large number of professional rescuers and volunteers. The use of the military might be based on deliberate planning or as ad-hoc immediate response, especially in cases when they are physically closer to the threatened area, than the civil protection forces. Popular roles are flood and fire fighting, debris clearance, post-disaster security and control. The guiding principle here is that military personnel should be used only to provide extraordinary services during the emergency and/or to supplement civilian units if there is a manpower shortage. In this case the military are operating under the control of civilian authorities, while preserving their own internal chain of command. The successful application of this model requires joint civil-military planning and training under variety of scenarios. Unified standards of operations are also required. A higher level of implementation of this model involves co-ordinated capability planning.
- *Deployment of military assets.* This is the most common model as it does not require specific legislation, planning and command arrangements. Military assets in this case are personnel (not units), individual means, specialised machines and equipment and various elements of typical military logistic kits, e.g. tents, blankets, stoves, equipment for water supply, electricity generators, etc. They could be provided together with personnel or simply delivered to the responsible authorities. All the operations in this model are led entirely by civilians. This model does not require joint planning and capabilities' development.
- *Systematic use of designated military units.* Development of special military units for disaster response, rescue and relief may have different reasons – traditions, a large territory, complex disaster relief in overseas territories, search for efficiency in the development of capabilities that are relevant in peacetime, crisis and war, a decision not to loose military capabilities during defence reforms and downsizing of personnel, etc. Among the most common cases are the use of military CBRN protection units for such type of crisis response and relief and military medical capabilities.

The military units might operate entirely under military command. Alternatively, the operational control can be delegated to the core national crisis management authority. In any case, they are between the first responders in emergency. In this model, the military units should be fully interoperable with the civilian disaster response structures in terms of doctrine, equipment and standard operating procedures. Some military units may perform permanent national civil functions as meteorological surveys, radiological control, production of geographic, geomagnetic, and hydrographic reference materials, etc.

- *Military responsibility for particular civil functions.* In some cases, the military are prepared to take over certain functions from civil authorities in emergency. Usually, such practice is a result of specific long-lasting capability developments, when it is considered more efficient to continue to provide these functions by the military rather than building a new civilian capacity. In other cases such arrangements may reflect the 'total defence' model. However, when the function is deliberately planned and legally regulated, it might be effectively applied. As a

general rule, if the respective decisions are made *ad-hoc*, such a mandate is not suitable for the military.

- *Use of the military in security and police roles.* This model is implemented in those national legal arrangements and policies that do not distinguish between military's domestic functions in providing public order and disaster response. In cases of large-scale disasters, pandemics or industrial accidents, one of the operational tasks is the isolation of the area in order to prevent marauding and spread of criminality. In other cases, local people enduring severe damages may react by violent anti-government actions. Both cases are sensitive, since the military might be provoked to use force against the citizens. Consequently, such practice requires legal introduction of an emergency statute that precisely determines the civilian-led chain of command, and the tasks and rules of engagement of the military.

This typology refers to the operational level of civil-military co-operation.²²³ At the 'upper' level is the civil-military co-ordination, i.e. the mechanism of crisis management decision-making, including on the use of armed forces.

3.2 Special military formations for disaster response

As already pointed out, the countries included in this review may have different reasons to establish special military units and even forces. However, usually key reason is immediate response (i.e. in less than five hours) by providing some essential services. The tasking, structure, equipment and training of the special military disaster response units are much closely co-ordinated with those of the other components of the national civil protection system than those of ordinary military formations. Their chain of command is adapted to civilian decision-making and management system. However, the special military disaster response units are, first of all, part of the national military, and should be able to take part in operations of the armed forces at any time, and without specific training or other adaptation (for example, instead of humanitarian search and rescue to conduct combat search and rescue).

From organisational point of view, the special military formations for disaster response have several common core components:

- Command and control;
- Communications and information;
- Specific support.

Their operations differ from typical military operations and may require specific training.

The units differ according to their range of operations and level of readiness, as well as their composition of professional, i.e. 'active duty,' and reserve staff. The presumption is that the critical support and services are provided by professional elements in all situations, quickly and effectively, and against a persistent threat the reserve elements increase both sustainability and performance of the assistance, provided to local people and the authorities.

²²³ Here, the term 'civil-military cooperation' differs from the CIMIC concept, which originally applies only to military interventions (humanitarian, peacekeeping, peace enforcement) abroad. See for instance Peter Rehse, "CIMIC: Concepts, Definitions and Practice," *Heft 136* (Hamburg: Universität Hamburg and IFSH, 2004).

Below we present examples of special military formations for disaster response from the countries under review.²²⁴

- After Spain suffered from a variety of massive natural disasters in the early 2000s,²²⁵ the Spanish Government decided in 2005 to establish a Military Emergency Unit (UME – Unidad Militar de Emergencias) as a new branch in the armed forces. The MEU is a permanent joint force, dedicated and highly specialised to intervene in emergencies in order to complement and reinforce the Spanish Civil Protection System. The unit maintains a high-level readiness for intervention and is deployable throughout the country and abroad. It is able to provide support in fighting fires, aiding in natural or environmental disasters (either natural or manmade) and situations of extreme hazard. Support will be primarily focused on sanitation, distribution of supplies, the establishment of infrastructures, surveillance of areas susceptible to environmental aggressions or ecological damages, and possibly clean-up and recovery. The UME's special capabilities provide for response to CBRN threats to the population.

According to a number of royal, legal and governmental acts, issued between 2005 and 2011, the Military Emergencies Unit may be deployed when any of the following emergency situations occurs:

- Emergencies that have their origin in natural hazards, including floods, earthquakes, landslides, extreme snowfall and other adverse meteorological phenomena of great magnitude;
- Forest fires;
- Emergencies, resulting from technological hazards, among which are chemical, nuclear, radiological and biological hazards;
- Emergencies, which are the result of terrorist attacks or illegal and violent acts, including those against critical infrastructures, dangerous installations or acts involving nuclear, biological, radiological or chemical agents;
- Environmental pollution;
- Any other act, upon the Prime Minister's decision.

The UME has five intervention battalions, located in Madrid, Sevilla, Valencia, Zaragoza and Leon, a support regiment, a CIS battalion, and a transportation battalion. The aviation component includes a helicopter battalion and 43rd Air Force Group with a mission for fire fighting and aviation search and rescue (To meet the mission, 43rd Group has 14 CL-215T and 3 CL-415 airplanes). The UME's HQ is at Torrejon Air Base (22 km from Madrid). The total number of personnel is up to 4000.

- For disaster protection purposes, the Bulgarian Military Medical Academy and its subordinate military hospitals maintain specialised Rapid Reaction Military Medical Team, based in Sofia, with 15 teams: 4 – surgery; 2 – resuscitation; 2 – therapeutic; 1 – toxicological; 1 – obstetrics- gynaecological; 1 – epidemiological; 2 – for infectious diseases; 2 – resuscitation

²²⁴ While Switzerland is not included in the study, the Swiss Armed Forces also maintain units in the Special Forces Command tasked to provide "protection and intervention in support of civilian authorities in Switzerland; ..." See <http://www.vtg.admin.ch/internet/vtg/en/home/themen/ksk.html>.

²²⁵ Catastrophes, such as the serious fire, which affected the province of Guadalajara in 2005; fires over thousands of hectares in Galicia in 2006; the sinking of the ship "Prestige," which blackened the Galician coast.

teams for aerial medical evacuation).²²⁶ The Team has also specialised transport vehicles (4 ambulances; 1 mobile treatment cabinet – therapeutic room; 1 mobile paediatric room; 1 mobile obstetrics- gynaecological room; 1 mobile surgery room; 1 mobile resuscitation room; 1 mobile dressing vehicle; 1 bus for sanitary evacuation. Each of the Academy regional branches in Plovdiv, Varna, and Pleven maintain 3 teams (surgery; resuscitation; therapeutic) with the respective specialised vehicles.

- Turkish Armed Forces Natural Disasters Search and Rescue Battalion (NDSAR) was established by a decision of the General Staff of May 31st, 2001 (after the August 17th 1999 earthquake) to carry out special tasks for natural or man-made disasters such as earthquakes, conflagrations, floods, avalanches, erosion; to conduct SAR missions for missing personnel; and take protective measures in cases of Chemical, Biological, Radiological and Nuclear (CBRN) attacks. NDSAR is equipped and trained to carry out any of its assigned missions worldwide. It is officially stated that NDSAR has conducted SAR tasks successfully at home and abroad regardless of the weather and terrain conditions and has the capability to accomplish any SAR mission in the future.²²⁷
- The National Search and Rescue Unit of the Israel Defence Forces placed under the Home Front Command is a highly skilled force trained to execute special search and rescue missions, both in Israel and abroad. The unit was founded in 1983, and its expertise is in rescuing people trapped under ruins. The unit is comprised primarily of reservists who are always on call, with prepared kits to enable immediate departure, and a small core of soldiers in mandatory service. In addition to the rescue teams, the unit employs doctors, engineers, operators of mechanical engineering equipment and handlers of rescue dogs. The unit is on-call 24 hours a day and is deployed whenever there is a disaster – an earthquake, tsunami, conventional or unconventional terrorist attack.²²⁸
- The Oketz ('Sting') Unit (K-9) of Israel Defence Forces is considered to be one of the most professional canine fighting forces in the world, both for their counter-terror methods and their treatment of dogs. Each soldier is partnered to a dog, which they train to sniff out explosives, track down terrorists and neutralise hostile threats. The soldiers go into the field with their canine partners and do everything together, from searching terror facilities to finding people under ruins.
- The Austrian Armed Forces have established in 1990 a Disaster Relief Unit (AFDRU), which is organised and trained for deployment abroad in up to 10 hours upon receiving an order. However, there are no constraints to the deployment of the unit in case of domestic emergencies. The tasks of AFDRU are varied and depend on the particular application. Its main tasks are search and rescue in urban terrain after earthquakes and treatment of drinking water after earthquakes and floods. Since AFDRU specialists (e.g. chemists, physicists, structural

²²⁶ Air transport is provided by other military units or companies.

²²⁷ See Natural Disasters Search and Rescue Battalion (NDSAR), available at www.tsk.tr/20_ingilizce_tsktr/3_general_issues/natural-disasters-search-and-rescue-sar.html.

²²⁸ Home Front Command, available at www.idfblog.com/about-the-idf/idf-units/regional-commands/home-front-command/.

engineers, crisis and emergency managers, doctors, technicians) are active in different fields, AFDRU can also respond well to exceptional events and take corresponding measure.²²⁹

3.3 Multinational disaster response and relief formations

Disaster management often requires equipment and expertise that not each country may obtain. In many cases, the speed of response is important in order to prevent further spill-over effects of the disaster. The international experience illustrates that in several large-scale disasters (as the Nepal earthquake in 2015²³⁰) and in very specific cases (as the Malaysian aircraft that went missing on 8 March 2014²³¹) the international military operations may bring disaster response capabilities of the required types and quality, and on time. This collaboration often makes the difference between success and failure during recovery operations.

Moreover, multi-national military formations for assistance in natural and manmade disasters, which started appearing recently, may be the prospective solution for a growing demand of specific capabilities for civil protection. They are established along common sources of risks such as big rivers, shared sea space or mountains, regular large forest fires, and others. The multinational formations provide mutually reinforcing capabilities and usually maintain high operational readiness. Examples of such formations include:

- TISA (TISZA) battalion's mission is the surveillance and urgent interventions in natural disaster situations along the Tisa River and participation in other disaster relief operations. Hungary, Romania, Slovakia and Ukraine are the contributing countries. National elements follow respective national laws and rules. A national contingent's staff of the battalion may not exceed 200 persons, and should be no less than 100 persons. The national contingents follow their national organisational structure and are stationed on the territory of their own state. They execute their tasks with their own equipment. In 2012, the chairman of TISA regional initiative Steering Group proposed that the multinational battalion's area of responsibility is extended also to the Danube River area during the next missions assigned. If the proposal of the Steering Group Chairman is seen as feasible and accepted by the member states, the importance of the regional TISA initiative would increase also by attracting new countries in the region. (Serbia was seen as a perspective member of the multinational battalion,²³² but, as of the writing of this report, the proposal has not been accepted by another country.)
- Germany, Poland and Denmark have developed comprehensive military co-operation since 1995. The ministers of defence of Denmark, Germany and Poland decided to establish a Danish-German-Polish military corps – Multinational Corps Northeast (MNC NE) –with Headquarters located in Szczecin, Poland. According to the trilateral Convention, "Within the limits of national constitutions and in accordance with the provisions of the Charter of the

²²⁹ See Austrian Forces Disaster Relief Unit at <http://www.bundesheer.at/suche/index.php?q=afdru&search=>.

²³⁰ See https://en.wikipedia.org/wiki/Humanitarian_response_to_the_2015_Nepal_earthquake.

²³¹ For an example on the role of the military in an international search operation see <http://www.smh.com.au/federal-politics/political-news/mh370-search-australian-led-hunt-for-missing-malaysia-airlines-plane-to-end-without-new-evidence-20150603-ghgaf0.html>.

²³² Gyula Papp, "The military engagement of multinational units in the interest of the European security and defense capability enhancement," *Hadmernok* (March 2008): 155-164.

United Nations, pursuant to the decisions taken by the competent national authorities, the Corps will be tasked: [...] to plan, prepare and on request to conduct humanitarian and rescue missions including natural disaster relief missions.”²³³

²³³ Convention between The Government of the Federal Republic of Germany, The Government of the Kingdom of Denmark, and The Government of the Republic of Poland on the Multinational Corps Northeast, 5 September 1998, Art. 3(1).

4 Specific military capabilities for domestic disaster response and relief

The country-specific method of building disaster management capabilities depends mostly on the construct of national security strategy and policy. An integrated approach to the national security sector is seen as more effective and efficient for capability management than the traditional single-department model.²³⁴ The building blocks of an integrated approach might include:

- A national security concept that integrates the security attributes of the state (independence, sovereignty, territorial integrity, etc.) with securing the vital functions of society;
- A national security strategy that provides consolidated management, employment, command and control throughout the entire 'conflict continuum' – peace, conflict, crisis, war, and post-conflict relief;
- Strategic management of the security sector based on co-ordinated organisations-specific aims, structures, standards of operations, and capabilities;
- A crisis management model based on balancing decentralisation and self-reliance with centralised leadership and reinforcement;
- 'Bounding' legislation²³⁵ and policy of its implementation that stimulate the national crisis response culture, building resilience, volunteerism and readiness to provide aid to others.

As it seen from the review, some countries are moving decisively on this path – Finland, Sweden, Italy, Norway, France, UK and others have made considerable progress in the last decade. These countries' approach to building cost-effective disaster response capabilities is based on a well-argued set of vital functions of the society and desired end-states, realistic threat scenarios, precise institutional tasking and co-ordinated capability development. Thus, nations aim to avoid both gaps and duplication already at the level of strategy and policy planning.

Critical for the disaster response relevant capabilities is also the transformation of former civil defence systems into ones for civil protection. The focus of civil defence is on wartime readiness, and what the system provides in normal, i.e. 'peacetime,' conditions is seen as of secondary importance. Civil defence requires complete centralisation, as this is a wartime function, and the principle of subsidiarity is not applicable. The focus of the civil protection system, on the other hand, is on the daily life of the people and these infrastructures and services that provide the vital societal functions. Such a system is expected to be decentralised to some degree through application of the principles of subsidiarity, mutual reinforcement and smooth transferability from normal towards crisis and wartime situations.

Surprising and severe natural and manmade disasters call for a massive co-ordinated reaction on a short notice. While the primary responsibility for disaster response lies with civilian agencies at local, regional, and state levels, military forces also have manpower, equipment, training and organisation

²³⁴ The value of the integrated approach is well illustrated by the recent UK Government decisions on national security. See, for example, *Fact Sheet 21: Coordinating Our National Security Approach*, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62503/Factsheet21-Coordinating-Our-National-Security-Approach.pdf.

²³⁵ And not 'prescriptive' legislation.

allowing them to strengthen the response, rescue and relief efforts. The degree in which their capabilities will be developed and utilised depends on the set of considerations explained above. While for the international engagement of military for humanitarian purposes there are some international guidelines,²³⁶ the adherence to such framework in military engagement for domestic purposes is a matter of a national choice. Nevertheless, most of the armies of the countries under this review have made disaster response, search and rescue, and relief an important part of their capability programmes, offering rapid response and performing medical assistance, logistical support, air support, aid distribution, protection and recovery in natural disasters, industrial accidents and other domestic emergencies.²³⁷

The special military capabilities, which are different from the typical military equipment, used by the countries under this review, are important for several disaster management tasks.

Search and Rescue

- Search and rescue operations might be performed on land, at sea or large water basins or flooded areas, and in urban environment. SAR involves the location, extrication, and initial medical stabilisation of victims of natural and manmade disasters or technological accidents.
- On land: search and rescue helicopters of the EC 135 P2 type, medical helicopters of Super Puma and Cougar type; Pumping water and sludge mobile equipment;
- On water: inflatable boats, rigid aluminium boats;
- In urban environment: air scenting or trailing (and tracking) dogs.

Transportation

Transportation is provided mostly from the affected area towards main military or civilian operational bases:

- Transport helicopters, e.g. Eurocopter EC 135 and Super Puma, Boeing Chinook heavy CH-47, Bell UH-1H, Agusta-Bell 212 and other types;
- All-terrain vehicles (trucks, vans, buses) for transporting people and equipment;
- Heavy trucks;
- Multiplatform special vehicle supply & recovery off-road;
- Cranes with towing capacity of more than 20 tons.

Emergency primary medical care

Capabilities to deliver immediate first aid on the scene:

- Military multipurpose, air-portable, high mobility off-road primary medical ambulance vehicles with good payload capacity of URO VAMTAC, HUMVEE, and others types;
- Role 1 field military hospital (could be enhanced by adding surgery capacity).

Chemical, biological and radiological reconnaissance and decontamination

- Towing or self-propelled capacity for radiological, biological and chemical reconnaissance, assessment and decontamination of personnel, equipment, terrain, and vehicles.

²³⁶ See for example the Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief, or 'Oslo Guidelines.'

²³⁷ See also Elisabeth Fischer, *Disaster Response: The Role of a Humanitarian Military*, Army-technology.com, 26 July 2011; and Charles-Antoine Hofmann and Laura Hudson, "Military responses to natural disasters: last resort or inevitable trend?" *Humanitarian Exchange Magazine* 44 (2009).

Providing or producing drinking water

- Mobile military water processing equipment;
- Water tank trucks.

Fire fighting

- Rotary of fixed wing air platforms, with capacity to load 4-5,000 litres or more, such as Bombardier CL-415, Canadair' CL-215-T and other types;
- Heavy forest fire trucks such as IVECO ML140E28W and other types;
- Heavy water tank trucks;
- Submersible pumps.

Providing interim emergency shelter

- Rapid deployable shelters – family or larger size for up to 100 people (ADAM type), equipped with electrical and heating systems;
- Electricity generators;
- Field kitchens;
- Mobile sanitation equipment.

Engineering for providing minimum essential access to affected areas

- Loaders;
- Excavators;
- Wheels tractors;
- Backhoes;
- Tilt rucks;
- Machines with capacity to work in tight spaces;
- Snowplough trucks (depending on the climate).

*Field communications and command and control*²³⁸

- Command and control structure and capabilities that allow for effective communications between deployed military formations, with the local authorities and the other state agencies involved in the response and relief efforts, including international contributors: Combat Network C4ISR radio (PR4G) type; radio communications, able to connect with aeronautical and civilian systems of mobile (TETRA, TETRAPOL) and satellite (INMARSAT, THURAYA) type; Information systems and network management, capable of managing messaging, mapping and receiving, and distributing SAT TV and broadcasting;
- Rapidly deployable command post(s) with universal applications for command, control and communications in the disaster area;
- Rapidly deployable shelter system for the command post (or trailer type).

Area security, including delivery of aid

- Military police all-terrain multi-purpose patrol vehicles of Land Rover RWMIK, M1117, Plasan Sand Cat and other types;
- Trained and disciplined personnel.

²³⁸ For details on the cooperation between EU and NATO in the development of C4ISR for crisis management purposes see Amleto Gabellone, "NATO-EU Cooperation on C4ISR Capabilities for Crisis Management," *Information & Security: An International Journal* 27, no. 1 (2011): 28-47.

5 Impact on civil-military relations

This review indicates a tendency to expand not so much the ‘domestic roles’ of the national military, but the ways in which the armed forces contribute to immediate disaster response, rescue and relief operations. The provision of military support to civil authorities and the people takes place in a specific context of the civil-military relations. As the UK Disaster Relief Operations Doctrine²³⁹ explains, natural and manmade disasters and catastrophes are source of humanitarian crises: if not addressed rapidly and effectively, they can deteriorate quickly and bring significant and comprehensive political, social, economic and security effects.

The studies of Katzenstein (1996)²⁴⁰ and Hofstede et al. (2010)²⁴¹ argue that democratic nations, that have developed a culture of securing people’s life and property, have a better capacity to survive an emergency with less damage; they are socially more coherent and politically stable. These studies claim that nations least able to withstand the effects of natural disaster, or at greatest risk to manmade disaster, are also prone to political instability, civil disorder and unrest.

From this standpoint, the use of military in domestic emergency operations should be timely and effective. However, any military engagement should stay within the framework of the established principles of the democratic civil-military relations²⁴² and should not challenge the human rights and citizen freedoms. The following points might be considered:

- *Decisions concerning armed forces always remain in civilian hands and, if force is used, it is commensurate with the concrete disaster response and relief needs.* The application of this principle guarantees that the use of military is a component of the (civilian) government’s crisis management policy, and not on a military initiative.
- *Any military engagement is based on political guidance and follows the requirements of transparency and accountability.* The Minister of Defence is the principle agent on behalf of the Government, who has full command authority over the military contingent and its operations. The minister is obliged to provide timely and detailed information on the character of military engagement and the results. He/she is responsible for the performance of the military both politically (to the public and the Parliament) and legally (for the issued executive orders).
- *The operational chain of command is led by a civilian authority.* Governments build national crisis management systems that are headed by a political body and are supported by a civilian permanent administration. The principle of civilian leadership is spread throughout all levels of the systems (national, regional and local). Civilians determine the tasks and charac-

²³⁹ Disaster Relief Operations, Joint Doctrine Publication 3-52, 2nd edition (UK Ministry of Defence, Director General Development, Concepts and Doctrine, June 2008).

²⁴⁰ Peter J. Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1996).

²⁴¹ Geert Hofstede, Gert Jan Hofstede, and Michael Minkov, *Cultures and Organizations: Software of the Mind*, 3rd edition (New York: McGraw-Hill, 2010).

²⁴² For reference see Plamen Pantev, Valeri Ratchev, Todor Tagarev, and Viara Zaprianova, *Civil-Military Relations and Democratic Control of the Security Sector. A Handbook*, ed. Plamen Pantev (Sofia: Procon, 2005).

ter of any military operation within the affected area, while the militaries maintain their internal chain of command.

- *The role of military in domestic emergency operations is defined under the principles of subsidiarity and proportionality.* This principle has different meaning, depending on the design of the national crisis management system. When the military have special units for disaster response, search and rescue, and relief they receive concrete and, in some cases, primary role, depending on the nature of the emergency. When the military provide general support or assets, then their role is strictly supportive and proportional.
- *Any military engagement is seen as temporary.* The highest value of the military is their high readiness and rapid reaction, but their core role is defence and military security. The governments avoid challenging this role with prolonged engagement in disaster relief operations.
- *The military role and operations are professionally prepared and the equipment they use is relevant to the missions.* Generally, the governments' position is that major disasters cannot be handled successfully without adequate preparation. In most of the cases under study that includes: case specific legal arrangements; equipment, relevant to the role; military specific and inter-agency training; co-ordinated planning; integrated alert system; and joint reporting mechanism. The military leadership is responsible to determine which military formation should be prepared and engaged in a disaster response mission and what are the relevant operational requirements (as the practice confirms, the military engagements are costly as the military equipment is often much more expensive than any comparative civilian equipment).

* * * * *

In conclusion, this brief review illustrates the existence of a common tendency: as the security environment is becoming more complex and the range of natural and manmade disasters is expanding, the role of the military in domestic disaster response and relief is growing. As the overall aims of any military engagement in domestic emergency are to save life, to relieve suffering, to limit damages and to restore, as quickly as possible, the essential functions of societies, the governments will use any opportunity and asset to respond effectively, and that includes the deployment of armed forces. Disaster response and relief are not the main tasks of the military, but are the ones that become increasingly relevant. Sometimes solutions offered by the military are the '*ultima ratio*' in saving lives and providing survival capabilities; there is hardly a scenario where military forces can be excluded.²⁴³

The military are under pressure for quick and comprehensive transformation. The core problem is that the simultaneous change in the strategic environment and domestic security needs generate political, military and management dilemmas about the roles, tasks, organisation, equipment and operations of the military at home and abroad. The countries under this study look for resolving

²⁴³ A lesson learned by the Austrian armed forces. See Michael Schuster, National and International Disaster Response, presentation at the NBC Defence School "Lise Meitner," slide 31, available at <http://www.advantageaustria.org/vn/events/MODschuster.pdf>.

these dilemmas through comprehensive security sector reforms, including transformation of national crisis management systems.

Resources

Official documents

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

AUSTRIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: AIT (Bettina Jager, Georg Neubauer)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In 2003, the Ministry of the Interior became the main responsible federal organisation for the coordination of disaster protection management, crisis management and international disaster relief. In this context, the Federal Crisis and Disaster Protection Management was established and became a major pillar of civil defence in Austria. It defines the measures and responsibilities in crisis and disaster case on the basis of two fundamental principles: the principle of subsidiarity and the principle of solidarity. The first principle is a political maxim specifying that intervention measures have to be implemented in the sense of self-help acting on the lowest possible level, e.g. the local level. This implies a bottom-up principle ensuring that measures necessary to manage crisis and disasters, are as long as possible performed by local organizations. The second principle ensures that in a case of an event, which exceeds the capacities at the local level, the community mechanism to overcome the crisis and disasters will be activated, ensuring that challenges are tackled with the help from the next higher organisational level. While the departments at the federal state are mainly responsible for prevention and financial recovery measures, the authorities of the provinces operate as the core institutions in response to natural as well as other types of crisis and disasters. Therefore the provinces have been featured with special rights for governing this issue. In crisis and disaster cases the Federal Alarm Centre of the state acts as a central hub for the crisis staffs of the authorities. There the responsibility to alert and warn the general public in crisis and disaster situations has been located (Jachs 2011a). At its regional counterparts – the Alarm Centres of the Federal Provinces, the incoming emergency calls will be taken by authorized call takers, who have an overview about the available resources and can alert the competent operational organization. According to the magnitude of the disaster, proper authorities are assigned to manage the events. The governmental authorities of the provinces are authorized to assign accredited emergency service organisations with disaster relief duties.

Several accredited emergency services exist in Austria, such as the Red Cross, Arbeitersamariterbund (“Workers’ Samaritan Association”) or the emergency helicopter C16. Moreover, the fire brigades, the water rescue, the rescue dogs brigade and the crisis intervention services need to be mentioned. In addition, the Austrian Armed Forces play an important role in the response to disasters. Apart from the duty of the national military defence, the protection of residuals and public facilities as well as the assistance in emergency cases are core tasks of the Austrian Armed Forces (Ministry of Defence and Sports 2014). After an official request, special units will be engaged independent from the fact, that the mission is taking place in Austria or abroad.

Austria benefits from initiatives of a well-established civil society. Voluntary organisations contribute to a network of civil defence at all spatial levels in Austria. Well-trained professionals and volunteers fulfil several duties in the area of civil protection. A longstanding expertise in risk assessment and a ramified network of cooperation with other countries and international organisations build a basis for comprehensive risk management capabilities in Austria. The knowledge-based approach will be continued in multiple projects within the context of cooperation between the science, industry and governmental stakeholders.

Although, there are no official statistics, the annual expenditures for preparedness measures of disaster management can be estimated at about 0.1 percent of GDP (status of 2013).

Table of Contents

AUSTRIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	209
Overview.....	210
Table of Contents	211
List of Tables.....	213
List of Abbreviations.....	214
1 Policy	216
1.1 Risk Assessment	217
1.1.1 Natural hazards	220
1.1.1.1 Avalanche	220
1.1.1.2 Flood	222
1.1.1.3 Further hazards	224
1.1.2 Technological hazards	226
1.2 Policy and Governance	227
1.2.1 Strategy scope and focus.....	229
1.2.2 Monitoring and analytical support to policy making; R&D	230
1.2.3 Policy for Prevention	231
1.2.4 Policy for Preparedness	232
1.2.5 Policy for Response	233
1.2.6 Policy for Relief and Recovery	234
1.3 Financing	234
1.3.1 Investing in preparedness	234
1.3.2 Investing in consequence management.....	236
1.4 Policy review, Evaluation & Organisational Learning	236
1.4.1 Post-Disaster Assessment.....	236
1.4.2 Departmental Lessons Learned systems	237
1.4.3 Centralised (national) Lessons Learned system	237
1.4.4 International exchange for Lessons Learned.....	238
1.4.5 Regular policy reviews	238
1.5 Resilience	238
1.6 Information sharing and data protection	238

2	Legislation	241
2.1	Crisis (emergency, disaster) management concept.....	241
2.2	General crisis (emergency, disaster) management law.....	243
2.3	Emergency rule	244
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	245
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	246
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	247
2.7	Legal regulations for international engagements of first responders and crisis managers	247
3	Organisation.....	248
3.1	Organisational chart.....	248
3.2	Organisational cooperation	250
4	Procedures	254
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	254
4.2	Operations planning.....	254
4.3	Logistics support in crises	255
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	256
5	Capabilities.....	258
5.1	Human resources	258
5.2	Materiel (non-financial) resources	259
5.3	Training	260
5.4	Procurement	261
5.4.1	Procurement regulation	261
5.4.2	Procurement procedures	262
5.5	Niche capabilities	263
	Resources	264
	Legislative acts	264
	Other normative acts	264
	Official documents (white papers, strategies, etc.)	265
	Online resources (e.g. websites of key CM organizations)	266
	Publications.....	267
	Expert interviews	270

List of Figures

<i>Figure 1: Climatic map of Austria</i>	217
<i>Figure 2: Pie chart over the occurrence of natural and technological disasters in Austria between 1994 and 2014</i>	219
<i>Figure 3: Spatial distribution of avalanche events in Austria</i>	220
<i>Figure 4: Forest Development Plan (FDP) of Austria</i>	221
<i>Figure 5: Spatial dispersion of torrential events</i>	223
<i>Figure 6: Epicentre map of Austria</i>	224
<i>Figure 7: Nuclear power stations in Austria's neighbouring states</i>	226
<i>Figure 8: Three-pillar-model of the Crisis and Disaster Management in Austria</i>	227
<i>Figure 9: Pie chart about the strategic focus on the phases of the Disaster Life-Cycle</i>	230
<i>Figure 10: Distribution of financial resources of the disaster fund</i>	235
<i>Figure 11: Distribution of funds for measures to protect against some natural hazards</i>	236
<i>Figure 12: Automatic online data exchange between Austria and neighbouring countries as well as link to the European platform EURDEP</i>	239
<i>Figure 13: Organizational Chart of the disaster management in Austria</i>	248
<i>Figure 14: Structure of the Coordination Committee in Disaster Management</i>	249
<i>Figure 15: Information flow in disaster situations between the EU and emergency response authorities in Austria</i>	256
<i>Figure 16: Structure of the Austrian Public Procurement System</i>	262

List of Tables

<i>Table 1: Overview on disasters in Austria from 1994 to 2014 (EDA 2014, PreventionWeb 2014),</i>	218
<i>Table 2: Overview on some relevant standards in the area of disaster management operations</i>	254
<i>Table 3: Overview on relief personnel for emergencies in Austria</i>	259

List of Abbreviations

AMA	Agrarmarkt Austria
APCIP	Austrian Program for Critical Infrastructure Protection
ARC	Austrian Red Cross
ASBÖ	Arbeiter-Samariter-Bund Österreich
BFW	Federal Research and Training Centre for Forests, Natural Hazards and Landscape Austria
BJA	Federal Chancellery
BMASK	Federal Ministry of Labour, Social Affairs and Consumer Protection
BMeIA	Federal Ministry for Europe, Integration and Foreign Affairs
BMF	Federal Ministry of Finance
BMLFUW	Federal Ministry of Agriculture, Forestry, Environment and Water Management
BMVIT	Federal Ministry for Transport, Innovation and Technology
BVT	Federal Agency for State Protection and Counter Terrorism
BWZ	Federal Alarm Centre
CBRN	Chemical-biological-radiological-nuclear
CECIS	Common Emergency Communication and Information System
CIWIN	Critical Infrastructure Warning Information Network
EADRCC	Euro Atlantic Disaster Relief Coordination Centre
ECURIE	European Community Urgent Radiological Information Exchange System
EKC	Action and Crisis Coordination Centre
EKC	Emergency Operation and Coordination Centre
EPCIP	European Programme for Critical Infrastructure Protection
ERCC	Emergency Response Coordination Centre
ESA/ESOC	European Space Agency/Operation Centre
FDP	Forest Development Plan
FFG	Austrian Research Promotion Agency
GDP	Gross Domestic Product
IAEA	International Atomic Energy Agency
IAN	Institute for alpine natural hazards at the University of Natural Resources and Applied Life Sciences (BOKU) in Vienna
INSARAG	International Search and Rescue Advisory Group

LWZ	Landeswarnzentrale (German term) – Alarm Centres of the Federal Provinces
MoI	Federal Ministry of the Interior
NROU	National Rescue Operations Unit
ÖBFV	Austrian Federal Fire Brigade Association
ÖBRD	Austrian Mountain Rescue Service
OECD	Organisation for Economic Co-operation and Development
PHAGO	Austrian Association of Full-Line Pharmaceutical Wholesalers
SKKM	National Crisis and Disaster Protection Management
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WHO	World Health Organisation
WLV	Austrian Forest Engineering Service for Torrent and Avalanche Control
ZAMG	Central Institute for Meteorology and Geodynamics

1 Policy

Austria is constituted as a federal, parliamentary, and democratic Republic. The Austrian government consists of the Federal Chancellor and the ministers and the Federal President assumes the role of the head of the state, which was considered more as a representative function. The administration structure is divided into the nine provinces²⁴⁴ Vorarlberg, Tyrol, Salzburg, Carinthia, Upper Austria, Styria, Lower Austria, Vienna and Burgenland (from the West to the East), 80 districts and 2,354 municipalities. The federal Republic of Austria is located in the heart of Central Europe and incorporates an area of 83,855 square kilometres. In relation to the total population of 8,504,850 people, 66 percent lives in urban areas (United Nations, Department of Economic and Social Affairs, Population Division 2014). Austria is bordered in the West by Switzerland and Liechtenstein, by the Czech Republic and Germany in the North, by Hungary and Slovakia in the East and at the southern border to Italy and Slovenia. Austria is a highly-developed industrialised nation and has an important service sector. As main industrial sectors, food and luxury commodities, mechanical engineering and steel construction, chemicals and vehicle manufacturing have been considered. Due to Austria's impressive landscape, tourism is a core sector of the economy. Widely known as a well-watered country, an innovative market sector for hydroelectric power emerged in the last decade. Furthermore, it has its own resources of petroleum and natural gas.

The Crisis and Disaster Protection Management of Austria is continuously decentralized and organized on a federal basis. This approach considers that the different political levels hold various competences and know-how, which are suitable to manage issues more efficiently. Interrelationships between levels and actors with vague divisions of responsibilities present a challenge for analysing roles and the actors' spheres of influence (Benz and Zimmer 2010). As in other legal materials in Austria, also in disaster management there is a three-way division of competence. The state is assuming the key part in defining prevention measures and establishing a framework for the implementation and the financing of mitigation measures (Jachs 2011b). The response to disasters mainly falls within the remit of the provinces. While the federal provinces are engaged in establishing a preparedness structure and planning of the response to disasters, as executive units local authorities (municipalities) are mainly responsible for carrying out these response missions.

On the base of a federal law, each province is authorized to create rules and laws on their own (Bußjäger 2003). Civil defence laws regulate how processes must be organized in contrast to normal life to minimize the impact of various kinds of disasters. The extend of validity of the civil defence - laws usually encompasses both the affected communities as well as the aid workers and support staff members, and finally the authority itself, depending on the country and the possible disaster scenarios. The different coordination procedures in the provinces are due to different national regulations governing for instance unequal definitions of crisis and disaster and regionally specific coordination structures. On behalf of crisis and disaster protection authorities, various emergency organizations are accredited to fulfil emergency missions in crisis and disaster situations (Jachs 2011b). Frequently they also use different systems and tools to carry out their tasks. Particularly, the

²⁴⁴ The term provinces of Austria corresponds to federated states – a synonym for counties, called “Bundesländer” in German.

applied systems of several cooperating units are connected and ensure interoperability between organizations and authorities.

1.1 Risk Assessment

As shown in Figure 25, four climate zones are influencing Austria. The Alpine Climate dominates the Austria because the Alps extend over 62.8 percent of the surface area and stretch across the West to the East of Austria. According to that, an Alpine Climate heavily influences regions from the West to the East while there are some Atlantic influences in the West and the North-West. The Eastern areas are belonging to the Continental climate zone and are characterised by a Pannonian climate, which causes, on the one hand, summer with hot weather and low precipitation, and on the other hand, cool-temperate winter. The northern area is characterised by a moderate Central European transition climate with (sub-)polar flows. Further South, there is the Illyrian climate with a sub-Mediterranean climate is prevailing. Considering these different starting positions of the climatic region, each of them has another risk profile. As stated by the Environment Agency Austria (2014), “63 percent of the national territory is under permanent risk of natural hazards like floods, debris flows and avalanches. Only 37 percent of the national territory is suitable for permanent settlement and that is under high pressure from competing for land uses.”

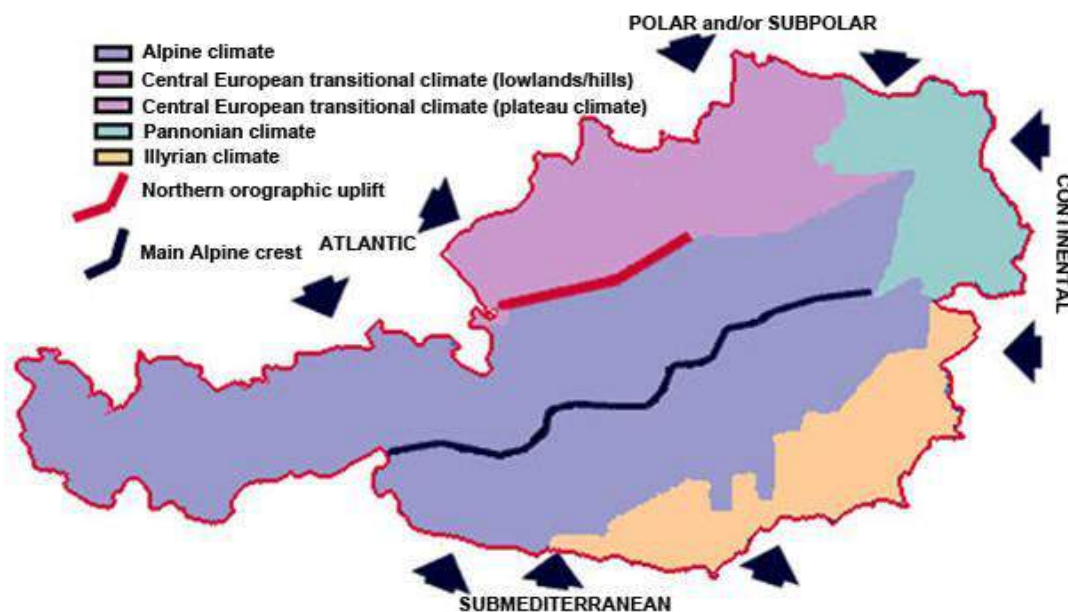


Figure 25: Climatic map of Austria

(Copyright 2008 Austrian Hail Insurance VVaG, modified). Available at:

http://www.umweltbundesamt.at/en/soer/soer2010_partc/soer2010_intro/; accessed: 11th October, 2014)

As can be seen in Table 7, a total of 32 events have been observed in the period from 1994 to 2014, which have caused about 30 casualties and a total damage of approximately EUR 6.7 billion. With 72.4 percent of the total floods constitute the largest part of the economic damage, which has been reaffirmed by PreventionWeb (2014). Austria ranks on the 133th place indexed with 3.58 percent in

the World Risk Report (2014).²⁴⁵ As identified in the World Development Report (2013), in the period from 2003-2012, Austria was affected by eight major natural incidents but had been spared from epidemics as well as pandemics. According to **Es ist eine ungültige Quelle angegeben.** infectious diseases have lost importance in recent decades in Austria, nevertheless, probably due the mobility of people the importance of some infectious diseases is increasing again. About 560 people corresponding to 0.8 % of the population deceased due to infectious diseases in 2007 in Austria. In the same year most often reported infectious diseases were bacterial food poisoning (about 10,200 cases), scarlet fever (about 2,050 cases) and infectious hepatitis (1,830 cases). 64 individuals were infected with AIDS that year. Influenza is one of the most common infectious diseases in Austria, every year up to 400,000 persons are infected by influenza and up to 6,000 of them die due to medical complications arising from this disease **Es ist eine ungültige Quelle angegeben..**

Table 7: Overview on disasters in Austria from 1994 to 2014 (EDA 2014, PreventionWeb 2014),

Date	Event	Type of Event	Affected/Killed	Est. damage (€)
1994 January	Storm	Natural Disaster	not known	2,000000
1995 June	Flood	Natural Disaster	not known/2	2,00000
1995 August	Transport accident – Braz, Vorarlberg	Technological Disaster	100/4	not known
1996 June	Flood	Natural Disaster	not known	5,000000
1997 July	Flood	Natural Disaster	not known/3	175,000000
1998 April	Earthquake – Arnoldstein, Carinthia	Natural Disaster	not known	not known
1998 July	Mine Accident – Lassing, Styria	Technological Disaster	not known/11	not known
1999 January	Transport accident – Deutschlandsberg	Technological Disaster	32/18	not known
1999 February	Avalanche – Galtür, Tyrol	Natural Disaster	10,000/50	41,570000
1999 May	Flood	Natural Disaster	not known/3	320000
1999 May	Tunnel Fire – Tauern tunnel, Salzburg	Technological Disaster	50/12	not known
2000 March	Avalanche – Kitzsteinhorn	Natural Disaster	not known/13	not known
2000 May	Storm – Styria	Natural Disaster	not known	20,000000
2000 October	Fire-Disaster – Kaprun, Salzburg	Technological Disaster	162/155	not known
2002 August	Danube Flood	Natural Disaster	60,000/9	2,900000000
2002 October	Storm	Natural Disaster	not known/2	5,000000
2002 November	Storm – Salzburg	Natural Disaster	300/1	not known
2003	Extreme temperature – Heat	Natural Disaster	not known/345	280,000000

²⁴⁵ The World Risk Report (UNU-EHS and Alliance Development Works 2014) expresses the risk “of becoming a victim of a disaster as a result of vulnerability and natural hazards such as earthquakes, storms, floods, droughts and sea level rise” on the basis of multiplying the exposure towards natural hazards, susceptibility depending on infrastructure, etc., coping capacities depending on the governmental structure, etc. and adaptive capacities related to future natural hazards and the impacts of climate change.

July/August	wave			
2005 July	Flood	Natural Disaster	900/not known	not known
2005 August	Alps Flood	Natural Disaster	not known/4	700,000000
2005 December	Extreme temperature – Extreme Winter Conditions	Natural Disaster	not known	not known
2006 March	Flood	Natural Disaster	516/not known	not known
2007 January	Extra-tropical Storms	Natural Disaster	not known	400,000000
2007 July	Extreme Temperature – Heat wave	Natural Disaster	not known/5	not known
2008 February	Fire accident – Egg	Technological Disaster	5/12	not known
2008 February	Storm	Natural Disaster	not known/4	500,000000
2009 June	Flood	Natural Disaster	not known/1	200,000000
2009 July	Storm	Natural Disaster	not known	500,000000
2009 July	Flood	Natural Disaster	not known	not known
2009 December	Extreme Temperature – Cold Wave	Natural Disaster	not known/2	not known
2012 February	Extreme Temperature – Cold Wave	Natural Disaster	not known/5	not known
2013 June	Flood	Natural Disaster	200/4	1,000000000

Regarding the frequency of the occurrence, as displayed in Figure 26, with eleven events, flood ranks on the first position, followed by storms with seven events and four transport accidents.

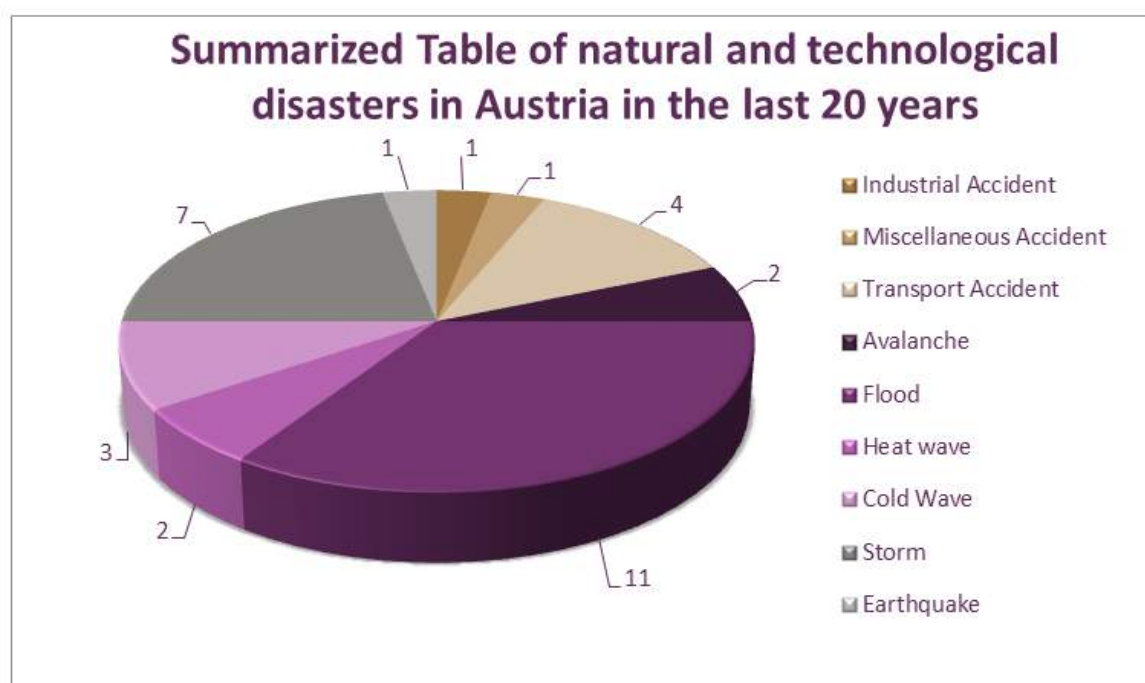


Figure 26: Pie chart over the occurrence of natural and technological disasters in Austria between 1994 and 2014
Available at: http://www.emdat.be/disaster_list/index.html; accessed: 11th August, 2014

1.1.1 Natural hazards

Potyka (2012a) highlighted that among others Austria is mainly affected by floods and landslides during the summer period and avalanches in the winter season. Referring to the Disaster statistic of Austria, presented by PreventionWeb (2014) during the period from 1980 to 2010 most people had been affected by floods, wet as well as dry mass movements and storms. While storms have occurred more frequently than floods, they have a higher impact of the economic loss. The case of extreme temperature in the “record-summer” in July/August 2003 caused the highest death toll at a stroke. In the frame of a common exposure to several natural hazards, the most relevant events listed in Table 7 will be discussed separately in the following paragraphs.

1.1.1.1 Avalanche

Due to the fact, that Austria has a big share of alpine area, from what significantly more than half has been defined as torrent as well as snow avalanche catchment areas, only 37 percent of the state territory can be used for permanent settlement (Environment Agency Austria 2014).

The past has shown that, despite avalanches have not recognised as the most commonly appearing events, they have caused a lot of human losses and about 35,000 damages to buildings (BMLFUW 2014a). Regarding the spatial distribution of avalanches in Austria, the BMLFUW (2012) stated, that a particularly high density of hazardous events has been registered in western parts of Austria and in eastern foothills of the Alps (see Figure 27).

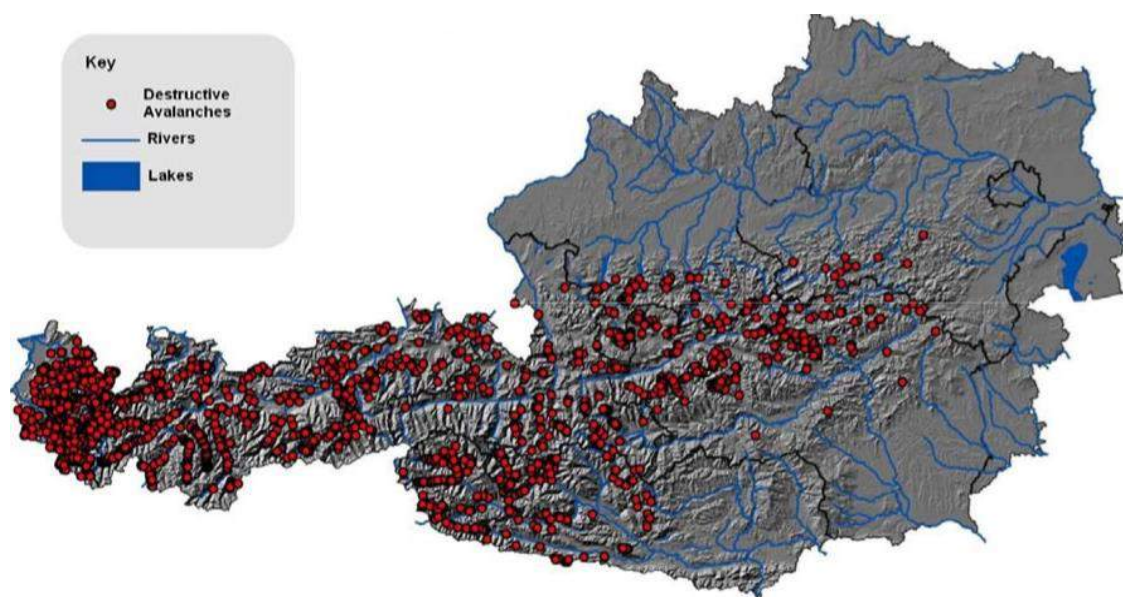


Figure 27: Spatial distribution of avalanche events in Austria

Available at: <http://www.fao.org/forestry/21310-09fd2cebf0189b5f2651d6182ff08a6aa.pdf>; accessed: 3rd October, 2014

Recent catastrophic events contributed to a higher public awareness for this hazard type. In general, a distinction between material and personnel damage has been made. According to the loss data base of the BFW, the highest percentage of material damage has been recorded in Salzburg and Styria (BMLFUW 2012). Based on an observation of a reference period over 25 years, avalanche disasters claimed an annual average of 30.3 personnel injuries. The BFW explained that the death

rate results mainly from serious accidents in high alpine regions and is often caused by entering an unsecured piste. In order to manage alpine risks, several risk-monitoring initiatives have been established in Austria. Different institutions operate avalanche databases with varying emphases – in sum, the avalanche documentation of the BFW and the IAN amounts to 12,000 data sets. Furthermore, Austria participates at some international research programs in the field of forecasting and protecting from Alpine hazards – to name some examples: MANFRED – Management strategies to adapt Alpine Space forests to climate change risks; ALP-Water-Scarce-Management – Water management strategies against water scarcity in the Alps; SicALP – Site protection in limestone Alps by means of forest regeneration measures.

Regarding the financial issue, it has been declared by the BMLFUW (2014a):

Torrent, avalanche and erosion control measures are financed from the Disaster Relief Fund of the Federal State (Disaster Relief Fund Act). Subsidies are granted subject to the provisions of the Hydraulic Engineering Assistance Act, which defines the terms and conditions under which subsidisation is provided as well as the principles of the planning and implementation of control measures. However, comprehensive protection against alpine natural hazards includes also organisational measures (emergency alert, alarm, evacuation) and civil disaster control, tasks, which are mostly implemented by the Federal Provinces.

Aiming at a sustainable mitigation strategy, Austria reverts to gentle protection measures. Due to the fact, that Austria is around 50 percent covered by forest, around 20 percent of this will be utilised as protection forest (BMLFUW 2007). As illustrated in Figure 28, within the Forest Development Plan, a protection function of 30.73 percent is determined for Austrian Forests (BMLFUW 2009). Within the Forest Act, the term protection forest has been specified by differing between site-protecting forests and object-protecting forests. The public will finance costs of the treatment for an object-protecting forest because it is dedicated to protecting human lives and culture. In contrast, expenses for the site protecting forest are mainly for the forest owner's account.

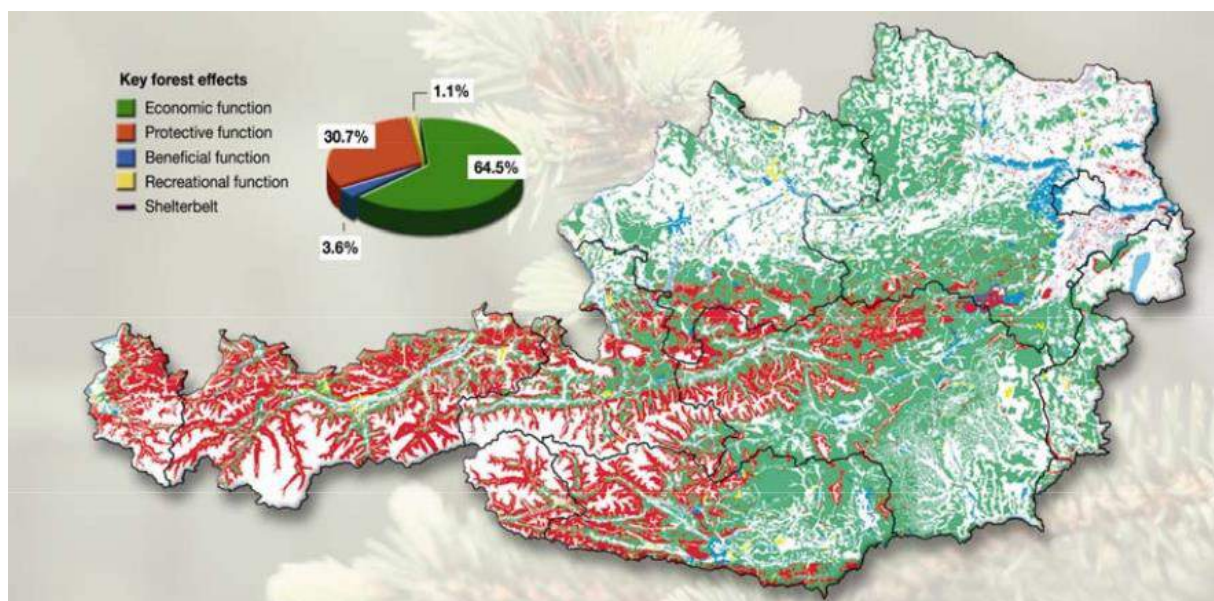


Figure 28: Forest Development Plan (FDP) of Austria

Available at: <http://www.fao.org/forestry/21310-09fd2ceb0189b5f2651d6182ff08a6aa.pdf>; accessed: 22nd September, 2014

As it is laid down by the Austrian Forest Act (Federal Law Gazette 2002), the governor of the provinces and the district administrative authorities, in that function especially the municipalities are practically responsible for the implementation of the law. On this base, the Forest Development Plan, the guidelines for Hazard Zone Plans and Forestry Plan have been defined. Furthermore, the Torrent Control Act and the Austrian Protection Forest Strategy regulate the avalanche protection measures in Austria.

1.1.1.2 Flood

Until now, the most damages of flood have been caused by the Central Europe floods in June 2013, which have also affected the Czech Republic, Germany, Hungary, Serbia, Slovakia and Switzerland (Reliefweb 2014). In the frame of the event, 6 fatalities have been recorded and an economic loss of approximately EUR 0.87 billion in the four most affected regions Lower Austria, Upper Austria, Salzburg and Tyrol. With a total loss of EUR 2.9 billion, the previous flood of August 2002 was labelled as “flood of the century” (Profil 2013). Beginning with heavy rainfalls in August, the Danube water levels raised and the overburdening of feeder rivers caused material damages and even personnel injuries (Bossong and Hegemann 2013). With an average annual precipitation of around 1,100 mm Austria is perceived as one of Europe’s most water-wealthy countries (BMLFUW 2014b). In mountain areas, heavy rainfalls occur frequently (Zwittkovits 1983). For the Austrian exposure to flood risk, mainly the two categories river flooding and flash floods will be relevant (Blöschl 2013). While flash floods are characterised by short, small-scale but intensive precipitation, the soil moisture of an affected area plays an additional crucial role for the cause of river flooding. If a certain proportion of the precipitation cannot be drained, the likelihood of a flood will increase. As stated by Gutknecht et al. (2002), a high humidity was observed in the affected regions during the flood in 2002. This factor was reaffirmed in 2006, in which a coincidence of a relatively moderate rainfall in March and high soil moisture caused the March-Flood in March.

In contrast, flash floods are more likely to cause spatial limited mudslides and landslides in mountain areas, but also represent a significant risk for wide asphalt areas in cities (Blöschl 2013). From a risk monitoring perspective, Figure 29 provides an overview of the spatial dispersion of flood and mudflows in Austria. It demonstrates clearly, a concentration of mudflows especially in the western part of Austria, which is due to its mountainous topography and an accumulation of prone-flood in the North and the South of Austria as well at the border regions in the east and the west. Within these areas, Vorarlberg, Tyrol, Salzburg and Carinthia account for around 62 percent of the total recorded torrential events with material damages or personnel injuries.

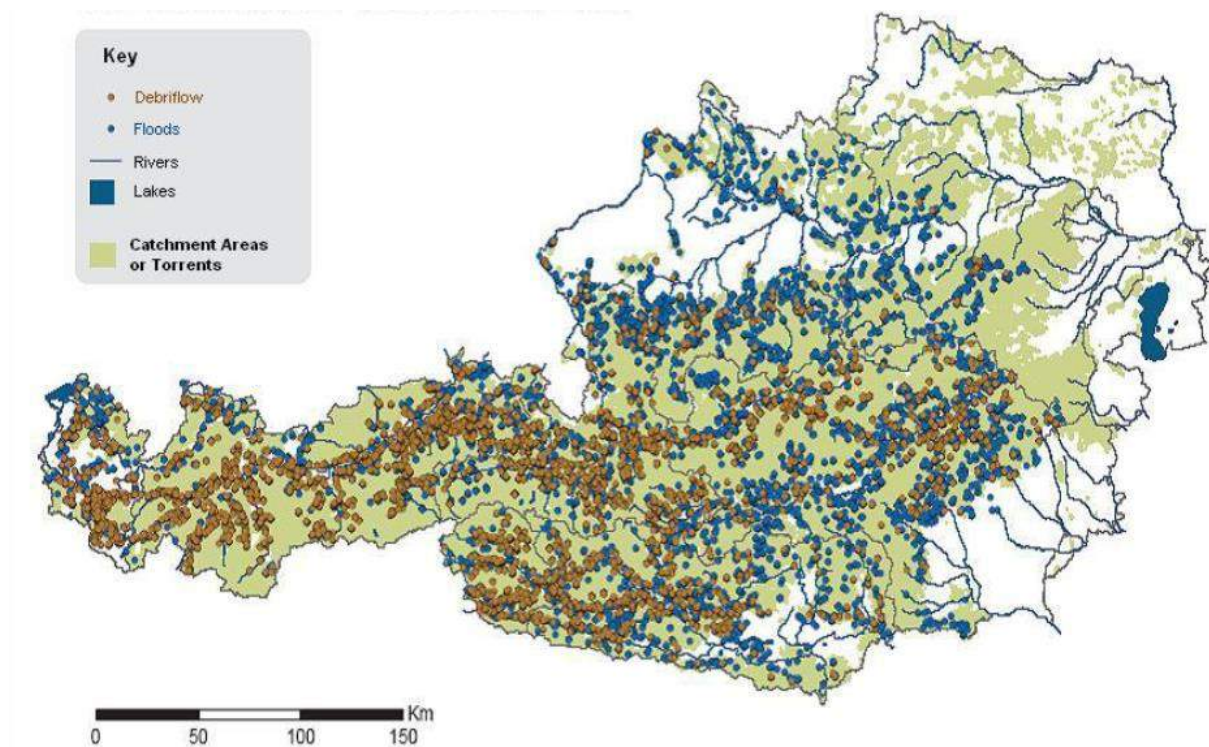


Figure 29: Spatial dispersion of torrential events

(blue bullet = prone-flood areas, brown bullet = risk of mud flows). Available at: <http://www.fao.org/forestry/21310-09fd2ceb0189b5f2651d6182ff08a6aa.pdf>; accessed: 11th September, 2014

The strategic direction of Torrent and Avalanche Control is located at the department III/5 of the Federal Ministry for Agriculture, Forestry, Environment and Water Management. Additionally, the strategic actor is responsible for the planning and the construction of technical and biological measures to protect against natural hazards (BMLFUW 2014c). Within the management of flood risk, various responsibilities result due to a federalist constitution of Austria. By identifying flood-discharge areas and danger zones, the Federal Water Engineering Administration provides expert opinion for the local regional planning and is also engaged in communicating the threat of flooding to the citizens. Departmental cooperation has been established with the Federal Ministry for Agriculture, Forestry, Environment and Water Management (department IV/6) and the offices of the Provincial government. The Austrian Ministry for Transport, Innovation and Technology/"via donau," together with competent offices of the provincial government, is responsible for flooding issues concerning the Danube, March and Thaya,. The "via donau" is a limited liability company, founded by the Austrian Ministry for Transport, Innovation and Technology, entrusted with the administration and preservation of Federal waterways. In addition, the "via donau" is operating the shipping information system DoRIS (Donau River Information Services) (BMLFUW 2014d).

Austria maintains an integrated geo-database, where flood risks and their adverse consequences can be assessed by a "total risk per river stretch" on the basis of a combination of past and future floods. As indicated by ICPDR (ICPDR 2012), as a result a total of about 1,840 square kilometres relating to 5.2 percent of the total river length that has been assessed - are classified as having high or very high flood risk in the Austrian part of the Danube River Basin.

1.1.1.3 Further hazards

Although Austria is not a typical earthquake area, due to the Alpine tectonics several seismic activity has been identified in Austria. To a yearly average, about 600 earthquakes occur in Austria, from which humans will perceive only 10 percent. Embleton-Hamann (2007) stated, that every 46.3 years an earthquake of epicentral intensity $I_0 > 7^\circ$ can be expected, which would cause heavy damages on buildings. Approximately all 15 to 30 years, earthquakes reached an intensity to cause medium damage on buildings. Certain Austrian regions exhibit a more frequent tendency of earthquakes than others. In particular, the Vienna Basin, the Mur-Mürz Valley, the Inn River Valley and the Lavant Valley region of Carinthia are the most prominent earthquake regions of Austria. Figure 30 provides an overview on the seismic activity²⁴⁶ perceived by the Austrian population since 1900, while only technically registered earthquakes have been suppressed. Within the article of Embleton-Hamann (2007), Villach (a city in Carinthia), Murau (a region of Styria) and Neulengbach (a city in Lower Austria) have been identified as the three regions with the most hazard potential. Furthermore, there it has been indicated, that the biggest spatial earthquake zone is stretched from the Mur-Mürz Valley to the Vienna basin. Approximately all 15 to 30 years, earthquakes reached an intensity to cause medium damage on buildings and only in an interval of 75 to 100 years they cause heavy damages on buildings.

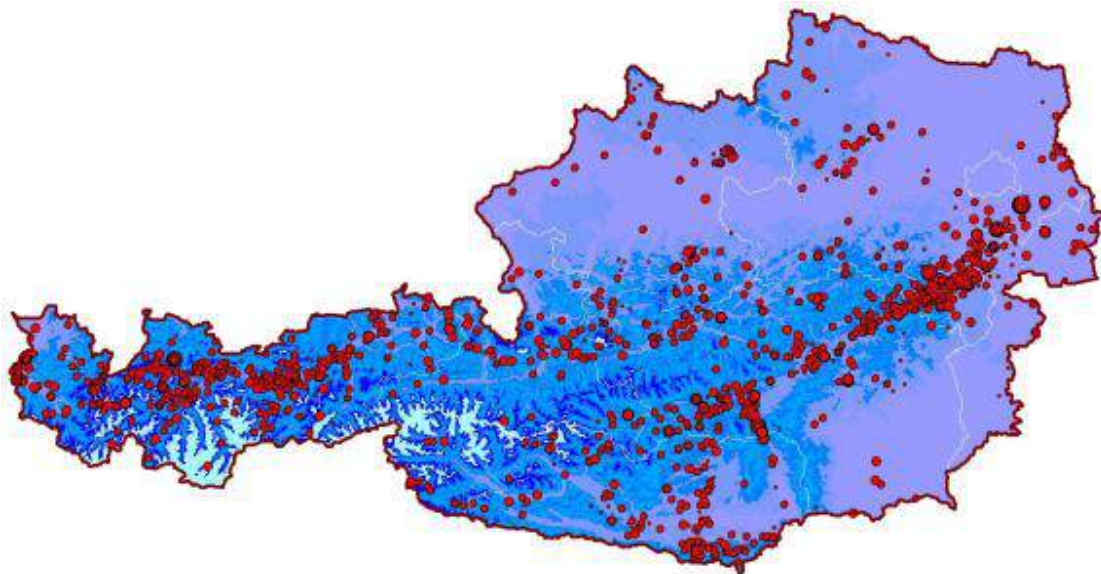


Figure 30: Epicentre map of Austria
provided by ZAMG. Available at: <https://www.zamg.ac.at/cms/de/geophysik/erdbeben/erdbeben-in-oesterreich/erdbebengefaehrungszonen-in-oesterreich>; accessed: 11th June, 2014.

Since 1992, ZAMG (2014a) has never registered a higher value than $I_0 = 6^\circ$ on the European Macro seismic Scale. The total of eight registered earthquakes, which have reached intensity higher than $I_0 = 6^\circ$ and have caused damages to buildings in the last 20 years have distributed as followed: Styria 4, Lower Austria 2 and Carinthia and Tyrol in each case one event.

According to ZAMG (2014b), the analysis of historically relevant areas provides cyclical repetition rates of these events, which build the basis for an estimation of the average of intensity and the occurrence of an event. On this knowledge basis, risk reduction strategies have been implemented

²⁴⁶ As “perceived” earthquakes, seismic activities with an epicentral intensity higher than 3° on the 12-class European Macroseismic Scale (EMS-98) have been defined.

for vulnerable regions, i.e. by zoning of the previously affected areas within an earthquake catalogue. Prevention measures play an important role in avoiding or limiting the potential impact of an earthquake, economically as well as life-saving. Furthermore, the provision of knowledge from an applied research, i.e. in the area of risk mapping, risk monitoring etc. will improve the basis of decision-making ability of responsible bodies. Thereby, appropriate deployment plans for the case of an event can be created and specific training programmes can be prepared for the rescue workers. In addition, the most relevant relief organisations for the emergency – fire brigades, emergency services, the Austrian Armed Forces and the police can be adjusted to known hazard scenarios (ZAMG 2014b). Especially, with earthquake-proof construction of historical buildings and critical objects mitigation will be achieved.

The Austrian Institute for Standards has contributed to the mitigation strategy by launching the standard “ÖNORM B 4015” concerning the establishment of a building code for an earthquake-proof design (2002). Hausmann et al. (2010) emphasised the importance of seismic risk mapping for the areas with a high residential density and for those, where critical infrastructures are located.

As illustrated in Table 7, the heat wave in August 2003 caused 345 deaths. It has been found out, that the so-called tropical days are the main driver for healthy risks. Especially, the number of days with a temperature higher than 30°C and not lower than 25°C constitutes a decisive factor. In the frame of the StartClim project (2005), it has been found out, that since the middle of the last century the number of hot days has increased significantly. As a consequence, the mortality rate has increased in Austria by 12.6 percent in the course of only six days in August. In combination with a lack of precipitation, drought caused high financial damages (about EUR 197 million) and the agricultural sector probably suffered the most, i.e. 30 percent of fodder deficit has been registered in Austria (Strosser et al. 2012). Frequently, heat wave phenomena have been discussed in the context of climate change. Based on the findings of the Centre for Climate Adaption (2014), “a widespread warming trend in both daily minimum and maximum temperatures was confirmed for homogenized time series of temperature data covering the period 1948-2009”. Looking at the extreme temperature in August 2003, which has reached 38.5° in Styria – 2013 a new record with 40.5°C has been registered in Lower Austria (ZAMG 2013). Extremely cold temperatures might cause material damages, but will not lead directly dangerous effects. An increased likelihood of avalanches, as a result from more frequent heavy precipitation events in winter has been assumed for central and northern Europe (Centre for Climate Adaption 2014). From an economic perspective, (thunder)storms and hail have also been taking into account for the risk profile of Austria. Especially in the summer periods between June and July, thunderstorms have been frequently accompanied by hail, which can cause damages to private property, i.e. cars, building facades, etc. as well as to the agricultural sector. Austria’s position has been identified as located in the middle of the European hail epicentre. Due to this fact, particular big hailstones with a diameter of more than 2 cm can be observed several times a year. As an example, in 2004 hail caused damages beyond EUR 20 million (SKYWARN Austria 2014). Considering the frequency of the occurrence, storms are belonging to the more frequent phenomena. Influenced by an Atlantic depression, the average wind speeds reach about 103 km per hour.

Additionally, hurricane-like winds might be triggered by warm winds, resulting from an extensive foehn situation. SKYWARN Austria indicated (2014), that a common occurrence of downbursts and winds with hurricane strengths can be registered in Austria. High wind strengths have been recorded

in peripheral areas of Austria, in particular for the South-East of Styria and the Western part of Upper Austria.

1.1.2 Technological hazards

In the context of this chapter technological disaster means a man-made, but not intentionally triggered event. In the reference period of the last twenty years, six major technological disasters have been recorded in Austria. As illustrated in Table 7, especially the accidents in Kaprun and Deutschlandsberg caused heavy damages of and caused a lot of fatalities with a total of about 180 persons. Since the nuclear disaster of Chernobyl in 1986, Austria became aware of the potential nuclear hazard. Although, Austria does not operate a nuclear reactor by its own, only in distances of about 30 km and more from Austrian borders, several nuclear power stations are in operation (see Figure 31).



Figure 31: Nuclear power stations in Austria's neighbouring states
Acquired from (BMLFUW - V/7 Radiation Protection 2013).

It has been indicated by experts of the BMLFUW (2013), that hazards of radiological emergencies might also result from transport accidents with radioactive material or might be caused by a terroristic attack. In order to be promptly informed, Austria has established a close cooperation with neighbouring states to exchange data obtained from radiological monitoring stations in each state (International Atomic Energy Agency 1986). Furthermore, the Department of Radiation Protection at the BMLFUW operates an automatically radiation early warning system, which detects data of the measuring network and sounds the alarm, if values exceed the limit. In the case of an emergency, an alerting path must be maintained. The Federal Alarm Centre, located at the EKC serves then as an information hub of the Federal Ministry of the Interior (Jachs 2011b). Since a bilateral or international notification has been receipt, a 24-hour stand-by service will be informed. Simultaneously the emergency will be communicated to the general public and the responsible authorities at the federal and the provincial level, as well as appropriate emergency personnel will be notified. In sum, stakeholders at the community, the provincial, the federal as well as the international level will participate in a radiological emergency case (BMLFUW - V/7 Radiation Protection 2013). This strong involvement of several stakeholder types can be also recognised based on the curriculum of training programs. Special ABC-training courses for emergency personnel, i.e.

the Austrian Armed Forces are organised by the Austrian Research Centre GmbH (Seibersdorf/Austria) and the International Atomic Energy Agency (IAEA).

1.2 Policy and Governance

Based upon the “SKKM Strategy 2020” of the Federal Ministry of the Interior (2009), traditionally the Crisis and Disaster Management in Austria is built upon the principle of three pillars. As shown in Figure 32, these pillars comprise measures of the authorities, of the emergency organizations and self-protection measures of the citizens. This model can be complemented by the involvement of selected economic stakeholders as well as by the contribution from the scientific community.



Figure 32: Three-pillar-model of the Crisis and Disaster Management in Austria

Measures of the authorities

Authorities are obliged to operate a preventive protection and a responsive protection in the case of an incident by prescribing provisional measures, coordinating protection activities and organizing the administrative process. Regarding the response phase of the crisis management cycle, authorities have to define strategic goals, instruct emergency forces and assistance staff by official jurisdiction and the usage of coercive measures. The tasks of the authorities are perceived as obligatory tasks and include the establishment of a framework and providing financial resources. According to the various phase of crisis and disaster management, civil defence and disaster protection require the support of hierarchically ascending administrative entities in emergency procedures because the competences are shared between the state, the provinces and the municipalities (Jachs 2011b).

Measures of the disaster relief units (emergency organization)

One characteristic of the Austrian Crisis and Disaster Protection Management is the strong involvement of voluntary organizations, which enable an easy access to a huge amount of human resources. Due to the fact that there is no single organisation in Austria, which will be mainly responsible for the response to disasters, related duties will be organized by voluntary organisations. The Austrian Fire Brigades as well as the rescue services have gained the most attention in this area. Regarding the possibility to request assistance from the Austrian Armed Forces, if the capacities are insufficient, their deployment is regulated by the Law concerning the military service § 2 (1)c), where it has been defined, that in the case of major emergencies, the provincial governor, the head of the district or the Major of a municipality are authorized to request for assistance (Jachs 2011a).

The security headquarters or warning centres of the Federal Provinces are the central control points for request and organize emergency services in Austria. On behalf of crisis and disaster protection authorities, various emergency organizations are accredited to fulfil emergency missions in crisis and

disaster situations, some are mentioned below. “The Austrian Red Cross (ARC) is a private organization based on the ideal of selfless charity and motivated by non-profit thinking. Operating independently, it performs humanitarian tasks with the help of volunteers and employees in order to assist all people in need, at home and abroad.”²⁴⁷

The Austrian Fire Brigade consists of umbrella organizations at the district, provincial and federal level and is together with the ambulance services and the Austrian Red Cross the most important stakeholder in protection against natural hazards. Furthermore, the Arbeitersamariterbund (workers' Samaritan association), the service of the Emergency helicopter C16, the Water rescue, the Rescue dogs brigade and the Crisis intervention team is strongly involved in emergency operations. Security agencies and its bodies, e.g. the federal police, support disaster protection authorities in the response phase by providing data to authorities and field support. For preparedness, the federal fire brigades, the ARC as well as disaster relief authorities have developed civil defence plans, mainly consisting of plans for alerting and operations as well as procedures (Jachs 2011b).

Measures of citizens (individuals and companies)

As an important part of mechanism of civil defence and disaster protection, individuals are encouraged to local self-protection measures and neighbouring help (Federal Ministry of the Interior 2009). Also companies have specific obligations in the case of an event. Everyone has the obligation to notify appropriate institutions and organizations in the case of a hazardous notice. Responsible authorities are authorized to force individuals and companies to cooperate and collaborate with authorities, to follow their instructions and to tolerate the utilization of private equipment.

Support from economic stakeholders

With stakeholders from the economy a close cooperation regarding the implementation of protection measures, fostering industrial resilience and risk mapping has been envisaged.

According to Jachs (2011b), operator of critical infrastructures in Austria will be regularly involved in committees addressing the preparation of protection strategies and risk profiles. Within the ANVIL report (2013), it has been noted that operators of critical infrastructures can be required to provide special equipment, e.g. emergency operation trains.

Contribution of the scientific community

Especially in the frame of risk mapping and monitoring, a comprehensive collaboration between research institutes, the academia and governmental departments of the state and the provinces has been established. Several state departments have introduced their own research departments.

²⁴⁷http://www.refworld.org/cgi-bin/texis/vtx/rwmain?page=publisher&publisher=AUT_RC&type=&coi=NGA&docid=&skip=0

1.2.1 Strategy scope and focus

A question that arises beforehand is what “all necessary activities” includes in this context since so far there is neither a general nor a European disaster management model, which would define the scope of all activities (Expert Interview 2014). Thus, the answer must be subjective to a certain extent. The expert at the MoI indicated that the current national disaster management strategy, which has a time frame until 2020, basically aims at the whole disaster management cycle but, nevertheless, there is a noticeable focus on preparedness issues like education and training of key response personnel, the promotion of new response technologies like decision support systems, simulation tools and also on an improved organizational framework for cooperation and coordination in the response phase. It is noteworthy that like in other legal matters in Austria, and thereby also in disaster management, there is a three-way division of competence. The state is not assuming overall responsibility but the key part in defining prevention measures and establishing a framework for the implementation and the financing of mitigation projects while the federal provinces are primarily engaged in establishing a preparedness structure and planning the response to disasters. The local authorities (municipalities) as executive units are mainly responsible for carrying out these response missions on the first intervention level and for that purpose they also provide the majority of response resources.

In general, strategic decision-makers in Austria are pursuing an all-hazard approach, but the priority-setting derived on the basis of the hazard experience in the last twenty years (Expert Interview 2014). Realistic scenarios, depending on the probability of occurrence of the event, their potential impacts and appropriate coping capabilities have shaped the awareness at the strategic level. Due to the fact that there is no primarily responsible for risks, separate foci on natural hazards have been defined by Austrian provinces, depending on the particular affectedness of the province. Although technological disasters had devastating effects in the past, e.g. the heavy fire disaster in Kaprun (in the Austrian province of Salzburg) on 11 November 2000, or the mine accident in Lassing (province of Styria) in July 1998, there is an emphasis on natural hazards.

Since high-risk plants are not very strong represented in Austria and SEVESO facilities are well regulated, Austria is not highly exposed by technological disasters. Floods have offered a big challenge for Austria, while avalanches deemed probable, but remain locally. In the most of the cases, personal injury could be prevented and natural hazards are limited to material damage – especially storms and floods generate the most significant economic losses. The higher feasibility to protect against more frequent risks like the impact of flooding but – as explained by the expert at the MoI – not against more rare events like a plane crash is reflected in policies and the legislation (2014). Because a big earthquake occurs once every four hundred years, mainly structural protection measures have been implemented in that area, i.e. historic buildings have been made earthquake-proof.

Like in many countries, there is still a noticeable tendency to pay highest attention to the response and the prevention phase, while there is a lower priority for the recovery phase. Nevertheless, recovery from disasters has always been achieved quickly due to the availability of public funding, a large number of volunteers and additional spontaneous volunteers and private donations. In the recovery phase after bigger events usually a higher number of diversified actors come into play, which is not permanently engaged with disaster management structures, which makes planning for this phase even more difficult. The preparedness phase and the response phase rather constitute

priorities for the state's level. Finally, the individual phases can be weighted as illustrated in the pie chart in Figure 33.

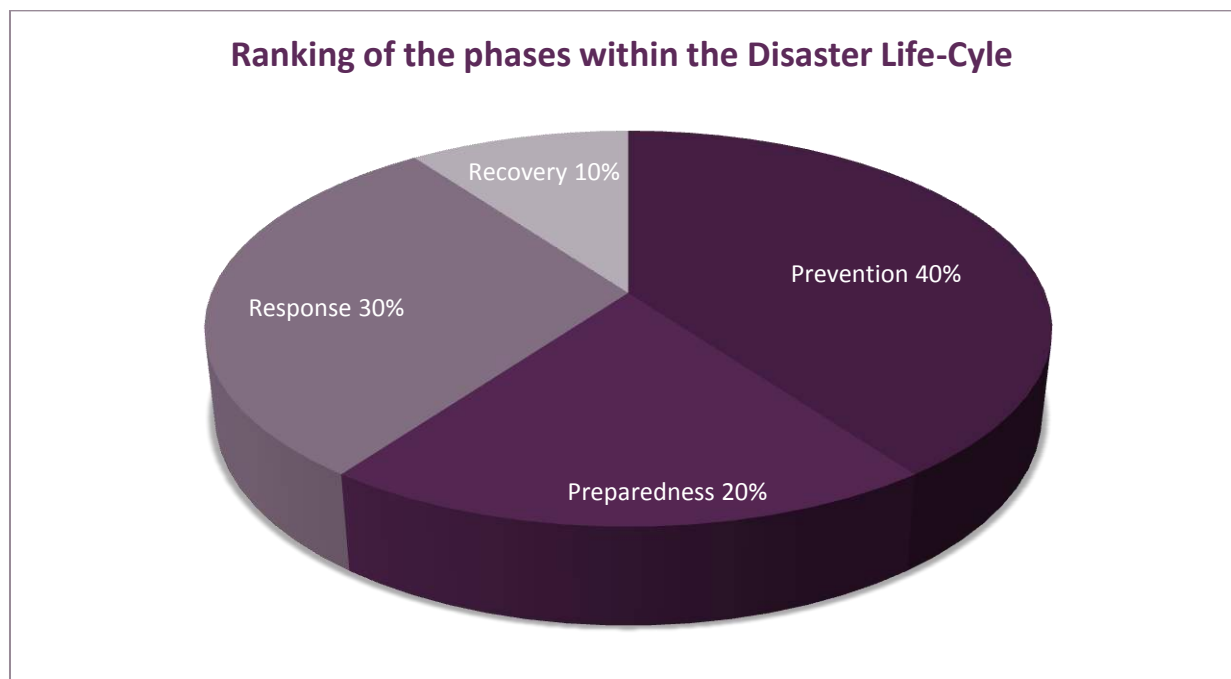


Figure 33: Pie chart about the strategic focus on the phases of the Disaster Life-Cycle

Although the national security strategy pursues an all-hazard approach, due to the national experience of the last twenty years, there is an emphasis on natural hazards. Based on the interconnectedness, also non-natural disasters have to be considered in Austria, especially pandemic hazards like the Swine Influenza in April 2009 (Reliefweb 2014).

The identification, presentation and the assessment of relevant natural hazards, e.g. by the mean of hazard zone plans, constitutes a relevant element of the integrated risk management.

As pointed out by the department of the Facility-related Water Management at the BMLFUW (2012):

Findings of the hazard assessment will be considered within the phases of the risk cycle including the management of disasters, the regeneration in the aftermath of a disaster as well as preventive measures. By providing a comprehensive presentation of natural hazards, the response phase is supported by preventive measures before a disaster occurs. As a part of the prevention, the activation of emergency services, i.e. fire brigades, etc., the provision of human and material operating resources, as well as warning and alerting mechanisms have been implemented.

1.2.2 Monitoring and analytical support to policy making; R&D

The academic sector is well integrated into governmental activities. Several research programmes are in place, which provide opportunities for the academic sector to engage with governmental bodies in research activities. Programs like the Climate Fund and the KIRAS security research program line have contributed considerable strides to disaster management to enumerate some academic important initiatives. Cooperation has been established for instance in cooperation with the University of Natural Resources and Life Sciences, Vienna, the University of Vienna or other

universities. International attention has for example been gained by the findings of projects like FloodRisk I and II, which have promoted a fully integrated and comprehensive approach to flood risk management.

The Federal state has launched multiple programmes to promote the protection capacities of various hazards. Research programmes are often focusing on an interdisciplinary or even a trans-disciplinary work in the area of hazard protection. In particular, the Ministry of Science and Research, the Ministry for Transport, Innovation and Technology and the Ministry of Economy, Family and Youth are strongly involved in research and technology. Associated to these ministries, there have been three agencies set up to manage the funding of research and science as well as development and innovation in Austria. These are the Austrian Science Fund, the Austrian Research Promotion Agency and the “Austria Wirtschaftsservice” (“Austrian Business Service”). For example, the Austrian Research Promotion Agency (FFG) – hosted by the Austrian Ministry for Transport, Innovation and Technology and the Federal Ministry of Science, Research and Economics concentrates on diverse security issues, inter alia at the Protection of Critical Infrastructure and the development of systems to manage or prevent various threats. Institutions as the Austrian National Bank, the Federal provinces as well as ministerial departments provide an incentive to promote research in the area of protection against hazards. As example, The Department of Natural Hazards and Alpine Timberline – located at the Federal Research and Training Centre for Forests, Natural Hazards and Landscape Austria, is a research institution dedicated to the development of practice-oriented methods for the sustainable protection of human settlements and infrastructure²⁴⁸. As main tasks the department is concerned with the monitoring of several natural hazards, their analysis and the development of countermeasures. The BFW is an Austrian federal, multidisciplinary research and education centre which holds the legal status of an institution under public law. Planning and protection measures will be funded by national and provincial programs, as well as by the EFRE fund of the European Union. Furthermore, the risk prevention of the natural hazards insurance completes the adjustment of losses by the Federal State. Austria does not confine oneself to one overall initiative, but generates benefit from many small programs. As mentioned by Mol (2014), important initiatives have been established in cooperation with the University of Agricultural Sciences and Natural Resources, the University of Vienna and the University of Innsbruck. Furthermore, projects of the AlpS, the Climate Fund and the KIRAS program line have contributed considerable strides to disaster management.

1.2.3 Policy for Prevention

At first of all, within the Austrian National Crisis and Disaster Protection Management emphasis is placed on mitigation concepts, including the avoidance of natural hazards by the construction of hazard zone plans and spatial planning. Furthermore, flood protection initiatives and torrent and avalanche control as well as avoidance strategies for technical disasters fall into mitigation measures. The establishment and the maintenance of disaster relief organisations and the promoting of disaster protection planning by encouraging mines rescue services, pandemic planning and radiation protection planning are important prevention measures. Furthermore, the crisis education and the training of professional and volunteered staff have a long tradition in Austria.

²⁴⁸ Information about the department is available at: <http://bfw.ac.at/rz/bfwcms.web?dok=4905>; accessed at: July 14th, 2014.

As a particular type of preventive measures, the policy papers European Programme for Critical Infrastructure Protection (EPCIP) and its national counterpart, the Austrian Programme for Critical Infrastructure Protection (APCIP) are concerned with the protection of critical infrastructures. “Europe's critical infrastructures are highly connected and highly interdependent. ... Interconnectedness and interdependence make these infrastructures more vulnerable to disruption or destruction”²⁴⁹. The purpose of EPCIP (COMMISSION OF THE EUROPEAN COMMUNITIES 2004) is to ensure that there are adequate and equal levels of protective security on critical infrastructure, minimal single points of failure and rapid, tested recovery arrangements throughout the Union. EPCIP would be an ongoing process and regular review will be required to keep abreast of the issues and concerns within the community. Success shall be measured by (i) The Member States governments’ identification and establishment of inventories of critical infrastructures in their jurisdictions according to the EPCIP drawn up priorities; (ii) Businesses collaborating within sectors and with government to share information, and reduce the likelihood of incidents causing widespread or lengthy disruption to critical infrastructures; (iii) The European Community resolves to establish a common approach to tackling the security of critical infrastructures through cooperation of all public and private actors.

A shared responsibility can be also observed within the prevention phase of the disaster life-cycle. According to specific hazard types, regional authorities are coordinated with the responsible federal authorities. Based on the state’s legislative power in the area of shipping, aviation and railway, the state plays an important role in the protection against human induced and technological hazards. In contrast, the provinces are exercising sovereign rights in the area of natural hazards – apart from the flood protection mandate of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. As an example, the risk zoning initiative of the Federal Ministry of Agriculture, Forestry, Environment and Water Management has been prioritized in consultation with the corresponding authorities of the Austrian provinces (Expert Interview 2014). At the strategic level, prevention measures are primarily concentrated on risk analysis and hazard monitoring. The risk assessment approach complies with the European standards, which have to be implemented since 2013. In Austria, the prevention strategy has been geared towards the knowledge about probable hazards, related risks and a nation-specific vulnerability assessment. This strategic approach has been also reflected in academic programmes, which are aiming at a trans-disciplinary research of risks by encouraging the participation of stakeholders from politics, administration and multiple scientific disciplines. The MoI indicated, that a common consensus about prevention priorities amongst the various stakeholders have been achieved by the knowledge based approach to policy making (2014). In case of a need, also economic stakeholders will be involved. As defined in the APCIP, the protection strategy for critical infrastructures is to be made under cooperation of the responsible ministries, public bodies and relevant infrastructure managers. Furthermore, special education and training programs are tailored for economic partners, especially for energy providers, because provincial governments are holding parts of their companies.

1.2.4 Policy for Preparedness

As mentioned above, preparedness is initiated at the level of the federal provinces. Stipulated by the arrangement Art 15a B-VG about the establishment and operation of an alerting and alarm system,

²⁴⁹ http://ec.europa.eu/councils/bx20041216/com_2004_702_en.pdf

the Federal provinces are induced to contribute to the preparedness by establishing warning centre, construct control and command centres as well as to manage operating centres (Jachs 2011a). They have the competence to establish emergency and relief organizations, provide an appropriate infrastructure and organise training events. Within the SKKM Strategy 2020 (2009), the core issues of preparedness have been supplemented with the recommendation to promote special technical skills and education programs and optimize coordination and cooperation structures. Despite the recent economic crisis, a slight increase of membership could be registered in voluntary organisations in Austria. Thereby, issues regarding the material equipment of these organizations or the creation of a national framework for a continued payment of remuneration will be raised. Due to the fact, that the source of financing volunteering is not very transparent – also municipalities do not pay the entire costs, financial adjustments or compensations from the Disaster Relief Fund seem to be possible operative requirements for the strategic level (Expert Interview 2014).

1.2.5 Policy for Response

The expert at the MoI (2014) indicated , that the response to disasters is based on the principle of subsidiarity encompassing a high degree of delegation of competence to the local and regional level. As emphasised by the BMLFUW (2012), public safety authorities and organisations – namely the fire brigades, the emergency services, the police, the armed forces and aid organisations are the key players within the response phase. Jachs (2011b) points out, that the response strategy comprises the danger removal by the government agencies, the mobilisation of disaster relief organisations, the command and control of disaster response operations, a cross border mutual aid system, the legal arrangement of the contributing rescue workers as well as media work and crisis communication. The response to disasters is based on the principles of competence (at local level) and delegation (subsidiary intervention to higher layers of administration, in case of necessity) and involves several departments at the municipal, district and provincial level. In the light of the sovereignty principle, the provinces instead of the federal state are the central control body of governing response activities. Competences to response to a concrete event are highly developed at the local level of communities, which are not steered centrally.

Although, the efficiency of the recent organisation principle is not clear at the first glance, the MoI emphasised that distributed responsibilities, in particular the decisive competences at the local level, become apparent in the case of an event during the relief and response phase (2014).

The capacity of local communities to response rapidly to known threats is owed to the circumstances that municipalities dispose of their own locally available utilities. The high level of self-initiative of the communities in is an advantage of the distributed administrative systems and accordingly high is the local commitment. The Federal Ministry of the Interior assumes the role of a strategic coordinator and raises cross-cutting issues, which exceed the spatial dimension of the individual provinces, e.g. cross-border missions and the establishment of early warning systems (2014). On the basis of several arrangements, the Federal Ministry of the Interior acts as a focal point by providing an interface for the systematic exchange of information between the regional level and the international level (Jachs 2011b).

1.2.6 Policy for Relief and Recovery

The BMLFUW (2012) has specified that the regeneration after a disaster means the rehabilitation of damaged buildings, infrastructure and transport routes as well as the financial settlement of the damage. As is evident from the national legislation, the approach and the means used in the preparedness and the response phases are covered by appropriate paragraphs in the legislation on disaster management. There is no rule, which defines recovery activities, because – from a legal perspective – the disaster management is ending with the response phase. The same pattern pertains at the policy level – there are programs concerning the prevention/mitigation of hazards and the protection against threats, but there is no recovery plan. Based on the hierarchical structure of the federal state, there is a clear division of subject-matter jurisdiction – while the state is responsible for the rehabilitation of essential infrastructures, the provinces attend to restore roads and the municipalities establish the community infrastructure. However, voluntary emergency/relief organisations have developed approaches for recovery. From a strategic viewpoint, the Mol argued that Austria has sufficient capacities for recovery and therefore, recovery is mainly considered as a financial issue (2014), while relief organisations are concerned with the reconstruction of buildings and infrastructure as well as the reimbursement. Two important instruments are the disaster relief fund and the solidarity fund of the European Union (Jachs 2011b). The disaster relief fund as an important financing instrument becomes also effective in the recovery phase. Financial provision has been made to individuals, including the payment of compensation to flood victims and to administrative units by granting financial alleviation, e.g. tax deferment or charge exemption. The civil society and the local economy express its solidarity and offers support, e.g. private donations to the victims of natural disasters or the offer of favourable loans for affected persons by banks or the “Austria Wirtschaftsservice” (Expert Interview 2014).

1.3 Financing

1.3.1 Investing in preparedness

As indicated by BMLFUW IV/5 (2013), the federal state provides as a central financing instrument for the natural hazard prevention the disaster relief fund, which will be financed at a rate of 1.1 percent of the annual revenue from some taxes, e.g. income, gain or cooperation taxes. The Federal Ministry of Finances administrates the funds and recorded a distribution of subsidies in the amount of EUR 1,873.71 million for the period 2002 to 2006. In sum, based on the financial resources from the Disaster Relief Fund, federal funding and financial contribution of the provinces, a total amount of EUR 4 billion will be provided from 2007 until 2016 for protecting against natural hazards. Due to the fact, that disaster relief falls within the competences of the provinces, their expenditures will be replaced by the federal state. As illustrated in Figure 34, three quarters of the committed funding was reserved for prevention (73.3 percent), followed by costs to remedy the damage with about 17.8 percent and reimbursements for means used in missions with 8.9 percent. The Law on a Fund for Catastrophes provides a budget for the establishment of disaster risk reduction on the national level by ordering the raising of financial means and regulating in detail their expenditure within Austria. Dedicated to finance prevention measures, a further substantial reinforce of the fund in the amount of € 47.5 million from Federal funds has been decided in 2013 (Federal Ministry of Finance 2014).

A clear focus on natural hazards – about ¾ of the fund, can be identified in Austria (Jachs 2011b). In accordance to the principle of subsidiarity, the provinces have their own budgets for DRR issues as well as the municipalities.

Although, there are no official statistics, the annual expenditures for preparedness measures of disaster management are estimated to be about 0.1 percent of the GDP (status of 2013).

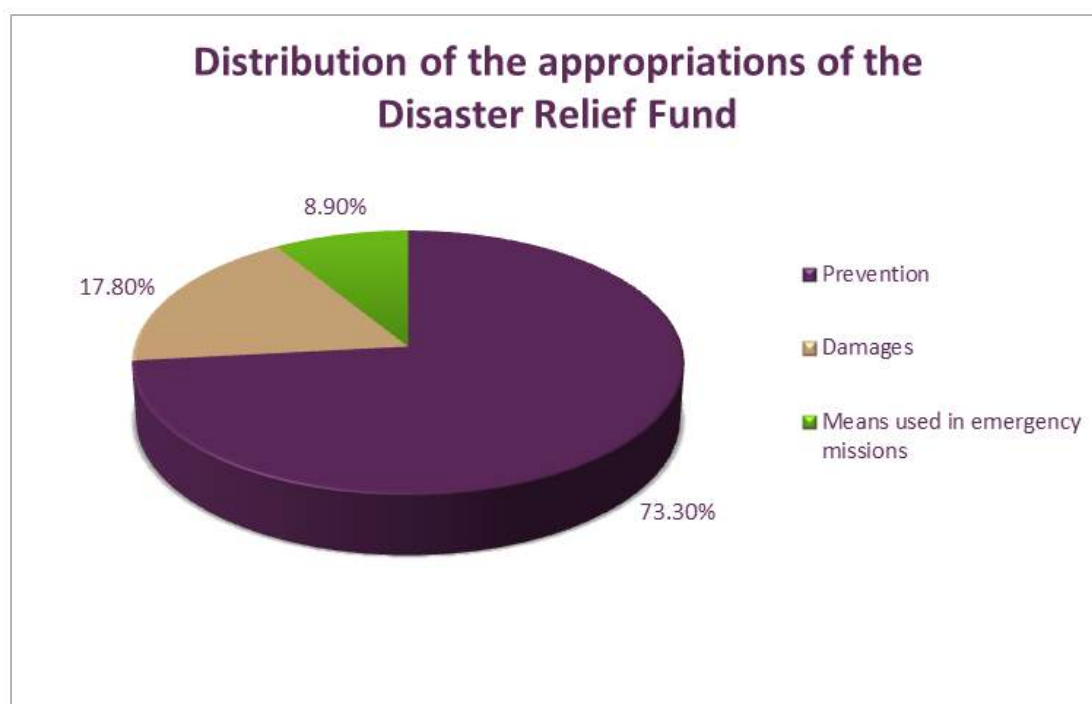


Figure 34: Distribution of financial resources of the disaster fund
Source: Federal Ministry of Finance (2014)

In the light of the Tsunami disaster in 2004, the Austrian government decided to establish a fund for response to disasters abroad. The budget of this fund is dedicated to financial aid in the aftermath of disasters as well as for the prevention against hazards. The Federal Ministry for Europe, Integration and Foreign Affairs (BMeiA) is administering the fund while the Austrian Development Agency (ADA) assumes the supervision of the fund. The Foreign Disaster Relief Fund regulated by the law on a Fund for disasters abroad, Art. 1-3 and provides for the establishment of a budget on national level to make contributions to combat disasters abroad (Federal Ministry for European and International Affairs and Austrian Development Agency 2009)

As illustrated in the Figure 35, the federal state, the provinces and municipalities of Austria allocate an annual amount of EUR 120 million for torrent, avalanche and erosion control. The largest share of 54 percent is used for torrent control, followed by 14 percent for avalanche control and 11 percent for protection forest and management of catchment areas. Only 4 percent of the sum is dedicated to implementing measures against rocks fall and slides (BMLFUW 2009).

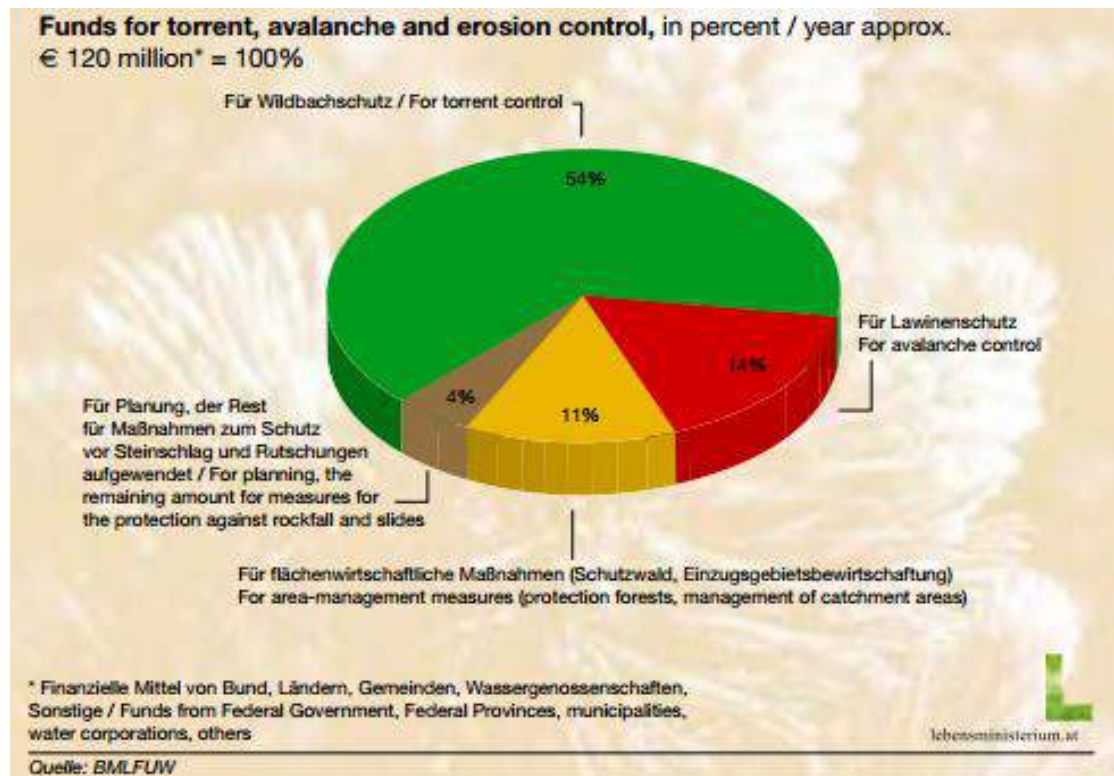


Figure 35: Distribution of funds for measures to protect against some natural hazards
 Source: BMLFUW 2009.

1.3.2 Investing in consequence management

Annually, the federal government spent more than EUR 200 million on natural disaster management. The bulk of this funding is channelled through the Federal Disaster Fund, which receives 1.1 percent of federal tax revenue. One quarter of the Federal Disaster Relief Fund is used to compensate households and businesses for losses from natural disasters. At present, neither individuals nor businesses bear the full cost of their exposure to climate risk, which effectively acts as a subsidy for development in high-risk areas (OECD 2013).

After an event, the reconstruction and stabilisation has top priority. There are some possibilities to fund certain recovery measures by the disaster relief fund or the solidarity fund of the European Union. The disaster relief fund is dedicated to finance prevention measures as well as recovery measures. The settlement is processed by an official request of the provinces, which take 40 percent of the total amount. Damages to private property as well as to public infrastructure will be covered by the fund. The BMLFUW IV/5 (2013) stated, that the disaster relief fund satisfies about 20 percent or 30 percent of the loss from disaster of private households and companies. By application for permit at the municipalities, subsidies will be paid out to aggrieved persons. This fund co-finances the operating equipment for fire brigades as well as warning and alerting systems.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

It was indicated by the expert that organisational learning in Austria is mostly based on the experience from real events, which might become disasters in Austria or in neighbouring countries

(Expert Interview 2014). Several developments and projects have been put in place in the last decades as results of lessons learned from disasters. A mining disaster in 1988 for instance led to a fundamental adaptation and reorganisation of emergency service for mines. A major avalanche in 1989 was the starting point for improvements in avalanche warning and protection. Although, there was not a general governmental evaluation of the floods in 2002, individual insights caused several adjustments. As a result of the disaster assessment of the tunnel blaze in Kaprun in 2000, the analysis concluded a lack of preparedness and information (CRiSMART 2014). On the one hand, the personnel of the mountain railway had not been trained for this kind of situation; they had received training for other types of accidents, but not for a tunnel fire. On the other hand, there was no awareness of the threat of a fire, because the train and the tunnel were considered to be fireproof. Apart from the shortfalls, the crisis response was smooth because there was an existing crisis management plan in Kaprun. “This plan had been designed for a possible accident at the local power station, but it was quite useful for structuring the rescue work in Kaprun.”²⁵⁰

Frequently, results from research project have set the starting point for learning processes. The evaluation of the floods in 2002 in the frame of the projects Flood Risk I and II caused an institutionalisation of flood protection, legislative amendments of the Water Act, etc. A follow-up project FloodRisk II was launched after the recent floods in 2013 in order to evaluate the achievement of these two projects. Also, the case of the Icelandic Ash has revealed a demand for optimization and awareness of rare dangers to mention another concrete example (Expert Interview 2014). A number of other projects could be mentioned as well. According to the BMLFUW (2012) lessons learnt have been considered within the prevention phase and will further direct the realisation of protection measures.

1.4.2 Departmental Lessons Learned systems

The expert at the MoI (2014) explained, that events will be reviewed either in the course of regular coordination meetings, initiated by the ministry concerned or by the competent authority on the basis of the departmental principle or in specific working groups if necessary. In that frame inter-ministerial working groups can be established to discuss hazard potentials and take appropriate actions.

1.4.3 Centralised (national) Lessons Learned system

Once a year, a meeting will be held to coordinate the state and the provinces, as well as individual departments and relief organisations. In the case of a cross-border event, a shared situational awareness will be reached by information exchange systems, located at the Federal Ministry of the Interior. The Federal Ministry of the Interior participates at the INSARAG and is also the main contact point for providing humanitarian aid. Within the last conference of Forum Alpach, the Ministry of the Interior organised a workshop about that issue together with UNOCHA. If there is no event, the bi- and multilateral information exchange is organised in the frame of experts’ meeting (mostly in Brussels). At the time, a close cooperation has been established with representatives from Switzerland and Germany.

²⁵⁰

http://www.fhs.se/Documents/Externwebben/forskning/centrumbildningar/Crismart/Forskning/Fallbanken/KAPRUN_T.PDF

It was critically noted by Bossong and Hegemann (2013) that the most investigations deal with technical aspects of a disaster, e.g. torrent control and hazard zoning.

1.4.4 International exchange for Lessons Learned

Exchange of knowledge in Austria is organised on a geo-strategical level in the aftermath of real events. As stated by the expert at the MoI (2014), additionally, insights gained from the supranational level or international organisations like the WHO have stimulated the examination of global threats, e.g. pandemics or epidemics. If a case of a global threat becomes apparent, the competent ministry conveys a conference to discuss the potential threat for the nation with all number of ministries. The MOI usually takes part in lessons learned meeting under the EU civil defence mechanism and shares the results with other national stakeholders (Expert Interview 2014).

1.4.5 Regular policy reviews

As indicated by Bossong and Hegemann (2013), apart from some attention-getting events, there was only less interest on crisis events in Parliament. Mostly, financial aspects, e.g. compensation were raised within debates, but also further protection strategies. Bossong and Hegemann (2013) counted 23 important reforms as a result of disaster experience, which changed the shape of the Austrian Civil Defence System (the Austrian Civil Defence System is based on five pillars: authorities, first responders, the population, science and economy. The Federal Crisis and Disaster Protection Management is a central element of the Civil Defence System) . Finally, a nation-wide capacity of disaster management was established based on the initiative of the Federal government.

1.5 Resilience

Within the Austrian Security Strategy (2013), the security policy referred to the concept of resilience as “restoring the proper functioning of the state and society in the aftermath of crises”. Resilience has not become a conventional term in the Austrian linguistic usage.

With regard to the Hyogo Framework for Action, where an emphasis is on the strengthening of the local resilience, Austria is fully on schedule. The well-established principle of sovereignty and subsidiarity is fostering the self-capacities on the community level. The community-based approach is supported by a strong civil society and effects a comprehensive protection against the impacts of natural disasters. A big part of the initiatives at the local level are concerning preparedness activities, and therefore, the national resilience concept is strongly related to that phase.

1.6 Information sharing and data protection

Data exchange with third states is done in specific areas on the basis of bilateral agreements. The Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, for instance, has already established programmes to exchange information about relevant threats and monitoring systems from neighbouring countries on the basis of special agreements related to nuclear incidents. Other data like meteorological data are also shared with corresponding institutions (Expert Interview 2014).

On the basis of intergovernmental agreements, experts have access to measurement data of the systems of neighbouring countries. In the case of releases of radioactivity in a connected country, effects bear on Austria can be estimated at an early stage. As can be seen in Figure 36, an access to exposure levels of nearly all European member states will be achieved via the link to the European platform EURDEP.



Figure 36: Automatic online data exchange between Austria and neighbouring countries as well as link to the European platform EURDEP

Available at: <http://www.bmlfuw.gv.at/umwelt/strahlen-atom/strahlenschutz/strahlen-warn-system/sfws.html>.

In cooperation with the Austrian radio channel Ö3, which is a programme of the Austrian Broadcasting Corporation (ORF) and the Austrian Cross, Team Austria²⁵¹ was founded in 2007. The initiative is purposing the recruitment, mobilising and coordination of spontaneous volunteers in advance. Thus will be lead to a more efficient assistance of volunteers in the case of a disaster. Via a volunteer's platform, crisis committees and authorities are enabled to get access of about 35,000 pre-registered volunteers. At the moment, a crowd-tasking feature for fostering resilience by improving the management of volunteers is being developed within the research project RE-ACTA.²⁵² This approach is further pursued in the frame of DRIVER. According to the Data Protection Act, the protection of the personal integrity has priority. Albeit, if the forwarding of personal data is in the interest of the affected person, i.e. in the frame of the search for missing persons by relatives, the reasons will be balanced. However, only involved organisations exchange personal data among each other, e.g. the emergency service forward information about missing persons to the police, because the search for missing persons is the duty of the police. Also, between the provinces and hospitals data will be exchanged. With regard to data about terrorist activities, data will be available for the Federal Agency for State Protection and Counter Terrorism (BVT) and operative units, but there is no central data management because there is no central unit for data retention (Expert Interview 2014). The Provincial Laws, e.g. the Vienna Data Protection Law envisages an own phrase for dealing with the registration of individuals. The Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management has already established programmes to exchange information about relevant threats from neighbouring countries on the basis of agreements, e.g. about nuclear incidents and more general – meteorological data (Expert Interview 2014). According to the Data

²⁵¹ Web-Page about Team Austria: <http://oe3.orf.at/teamoesterreich>; accessed: July 14th, 2014.

²⁵² RE-ACTA project: <http://blog.rotekreuz.at/reacta/beispiel-seite/>; accessed: July 14th, 2014.

Protection Act, the protection of the personal integrity has priority. Albeit, if the forwarding of personal data falls within the predominant interest of the affected person, e.g. in the frame of the search for missing persons by relatives, the reasons will be balanced. However, only involved organisations exchange personal data among each other, e.g. the emergency service forward information about missing persons to the police, because the search for missing persons is the duty of the police (Expert Interview 2014). Some provincial laws envisage an own phrase for dealing with the registration of individuals.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In general, there are three documents, which can be considered as the basis for shaping the Austrian approach of civil defence.

SKKM 2020 Strategy

As the main strategic document at the national level, the Ministry of the Interior developed the “SKKM 2020 Strategy”, which defines some basis elements of the Austrian civil defence. The strategy is in compliance with the security and defence doctrine (adopted in 2001) and in addition, it provides amendments concerning the internal security. Therein, the pillars of the National Crisis and Disaster Protection Management were defined (Federal Ministry of the Interior 2009). In July 2009, the Federal Government took notice of the report and approved it. Within the SKKM 2020 Strategy, several commitments to European strategies, such as the prevention strategy, were made and the need for harmonisation between the Federal State, the Federal Provinces and response organisations in disaster cases was addressed. As explained by Potyka (2012), the coordination activity of the SKKM, is a service by the Federal Ministry of the Interior to the provinces.

The main principles, mentioned within the SKKM 2020 Strategy are:

- Considering the principle of self-sufficiency and subsidiarity.
- Ensuring a comprehensive network of danger avert and disaster relief on the basis of volunteers and professionals.
- Easy access to military assistance.
- Promoting self-protection capability of the general public by civil protection initiatives.
- Increasing the level of intervention by concluding cross-border cooperation.
- Respecting the principles of non-discrimination, independency, need-orientation and efficiency in international disaster aid.

In order to achieve the aims of an optimal risk and hazard mitigation, early detection, ensuring a high level of preparedness, efficient and rapid response as well as a quick return to normality after disasters, several tools and measures were specified. Basic elements include technical innovations, stimulation of trainings and education across organisations, improvement of the coordination structure. As an example, recommendations to establish curricula for strategic, tactical and operative staff were addressed. Amongst others, a focus lies on a research-driven and science-based approach to strengthen the disaster management capacity in Austria. In addition, an emphasis was given to the disaster relief fund as the core financial instrument, which provides ¾ of the budget for flood protection and avalanche control and 8.9 percent for operative respond and surge arrangements. Within the document, the traditional three-pillar-model of civil defence (measures of authorities, respond organisations and self-provision of the population) was extended to include the citizens extra as well as the economy. With regard to the Directive 2008/114/EC²⁵³, the strategy indicated the

²⁵³ Directive 2008/114/EC issues the identification and designation of European critical infrastructures and the assessment of the need to improve their protection.

involvement of operators of Critical Infrastructures in prevention, mitigation, response and relief measures.

Austrian Security Strategy

The Austrian Security Strategy, adopted in 2013, provides a framework for shaping the security policy (Federal Chancellery of the Republic of Austria 2013). Regarding Austria's relationship with EU, UN, NATO, PfP (Partnership for Peace), EAPC (Euro-Atlantic Partnership Council) and OSCE (Organisation for Security and Cooperation in Europe), a clear statement was made to efforts establishing a common space of security. Therein, the cooperation of the international stakeholders in accordance with the principle of a division of labour for comparative advantage was emphasised. Within the strategy, main sources of threats were defined (Federal Chancellery of the Republic of Austria 2013):

- international terrorism
- the proliferation of weapons of mass destruction
- domestic and regional conflicts or turmoil that affect Europe or have global repercussions
- "state failure"
- natural or technological (man-made, non intentional) disasters
- attacks against the security of IT systems
- threats to the strategic infrastructure
- transnational organised crime
- drug trafficking, crime, corruption
- illegal migration; unsuccessful integration
- the scarcity of resources (energy, food, water)
- climate change, environmental damage and pandemics
- piracy and threats to the transport routes
- the repercussions of the international financial and economic crisis on security

In order to overcome threats in an adequate way, it was defined to continue contributions to PfP (Partnership for Peace) in the security area. Particularly, military interoperability, participation in operations, and the utilisation of cooperation opportunities offered will be ensured by an intense cooperation with other PfP-States.

Within the strategy, special mention was made to the role of the Austrian Armed Forces in internal security. Their participation in national and international crisis management operations recorded remarkable success. In the cases of a natural disaster, threat to a Critical Infrastructure or policing operations, civil authorities can request the Austrian Armed Forces for assistance. Based on multiple areas of the deployment of Austrian Armed Forces, the strategy determines the availability of at least 12,500 soldiers to be deployed in the event of domestic disaster relief operations.

Austrian Programme for Critical Infrastructure Protection (APCIP)

As already indicated in chapter 1.2.3, the Austrian Programme for Critical Infrastructure Protection (APCIP) addresses the protection of critical infrastructures as an approach for specific threats. Therein, the measures to implement APCIP on the national level of Austria were reflected (Federal Chancellor of Austria 2013). In order to achieve the objectives, defined by APCIP (European Programme for Critical Infrastructure Protection), an individual investigation of country specific threats and critical infrastructure was conducted. As a part of the vulnerability analysis, the following domains have been examined: the Constitutional Institutions, the Energy Sector, Information and Communication Technologies, Water Supply, Food, Health and Social Affairs, Finance, Transport and

Distribution Systems, Chemical Industry, research organizations and emergency and rescue workers. The Action plan proposes the drawing up of a list with strategically important infrastructures in Austria and their prioritization, the definition of standards of protection and security, the implementation of protection measures, the development and the establishment of cooperation regarding the information management and the evaluation of the implemented measures. An orientation on the Critical Infrastructure Warning Information Network (CIWIN), which is part of the European Programme for Critical Infrastructure Protection (EPCIP) have been considered.

2.2 General crisis (emergency, disaster) management law

The Austrian Federal constitution does not indicate an own matter of powers and responsibilities for disaster protection or disaster relief. Therefore crisis and disaster management in Austria refers to a *fragmented horizontal competence* with different legislative responsibilities and laws depending on the specific case of an event (Jachs 2011b). The disaster response system in Austria includes mechanisms to prevent and to ward off disasters. As in other fields of public administration in Austria, legislative and executive responsibilities concerning disaster management are divided between the Federal Government and the Federal Provinces. Exceptions exist, where cases are inseparable matters of the federation, e.g. the radiation protection falls within the competence of the federation. The civil defence laws address the affected communities and the aid workers, support staff members and the authority itself. The different coordination procedures of the provinces are due to the nine different national regulations resulting from unequal definitions of crisis and disaster and regionally specific coordination structures. In Austria, the shaping of the internal security follows the principle of optimizing the warning systems, ensuring cooperation between all bodies with regional civil defence authorities and emergency services based on the legal requirements of the National Crisis and Disaster Protection Management (SKKM).

The National Law Desk Survey conducted by Potyka (2012) concluded:

In substance, there is no national disaster management law, but only national disaster management coordination by the Ministry of the Interior. However, particular legal regulations (e.g. in the fields of customs, traffic etc.) also take account of the needs in case of disaster, which facilitates national activities in the field of disaster management.

In 2009, the directive to mitigate the risks of flooding for health, environment, heritage and economic affairs was implemented in national law (European Parliament and the Council 2007). Thus, competences of the federal state and the provinces were affected in the area of disaster protection, environmental protection as well as flood and avalanche protection (Hornich 2013). Furthermore, the legislation about the Union Civil Protection Mechanism which contributes to the implementation of Article 222 TFEU stipulating the obligation to provide aid in the spirit of solidarity in case of a terrorist attack or disaster came into force in 2014 (European Union 2013).

There is no primary act of disaster management on the state level, but the provinces have established laws on disaster relief or disaster protection on their own. Provinces have enacted regulations regarding the disaster response and the disaster preparedness. Within the report of Potyka, an overview on relevant disaster related laws have been provided (2012). Disaster mitigation, prevention and disaster risk reduction have been covered by the Austria Forest Act (2002). The Water Act defines water-specific mitigation and prevention strategies (Federal Law Gazette 1959). As

already mentioned in previous chapters, also the Law on Defence (2001) is a disaster related regulation at the national level.

At the level of municipalities, districts and provinces the following plans are available (Jachs (2011a), Jachs (2011b)):

- Disaster Protection Plan
- Special Alarm Plan for certain disasters, like tunnel accidents
- Emergency Plans for SEVESO establishments
- National Intervention Plan for radiological emergencies
- Pandemic Plan
- Plan on the Early Warning System: Radiation Early Warning System, Weather Warning, Communicable Diseases
- Plans on the flood prediction model

2.3 Emergency rule

In Austria, no emergency rule exists in the ordinary sense of the word, but what is involved is an extended transfer of legislative power if the Parliament is unable to meet and to perform its functions (EUROPEAN COMMISSION FOR DEMOCRACY THROUGH LAW 1995).

Bossong and Hegemann (2013) reaffirmed this finding and explained:

There are no rules for a general state of emergency including derogations from civil liberties and democratic oversight. Emergency laws are to be differentiated from a local or regional state of disaster that allows for the upscaling of competences. As determined by Art. 18-II B-VG, the federal president can put in place provisional legal acts at the suggestion of the federal government for the prevention of an “obvious, irreparable damage for the society” if the national parliament is not able to convene.

As indicated by Khake (2009), the power to take measures in times of crisis or emergency in order to provide necessary supplies was transferred to the executive body of Austria. In detail, the Constitution of the Republic of Austria entitles the federal authorities to take special measures to ensure basic supplies in times of war, threats to the constitutional order and public security, natural disasters or other calamities are provided for.

On the recommendation of the Federal Government, the President of the Republic of Austria is authorised to take necessary measures by way of provisional law - amending ordinances, if the Parliament is not assembled, or if it cannot meet in time, or is impeded from action by circumstances beyond its control, to prevent obvious and irreparable damage to the community (EUROPEAN COMMISSION FOR DEMOCRACY THROUGH LAW 1995). It was further pointed out, that such an “ordinance requires the countersignature of the Federal Government. Such ordinances must be submitted by the Federal Government to the National Council (comment: a chamber of the parliament) without delay. Within four weeks of submission, the National Council must either vote a

corresponding Federal Law in place of the ordinance or pass a resolution demanding that the ordinance immediately be invalidated.”²⁵⁴

Within the Constitution, the Austrian Armed Forces are foreseen to “protect the constitutional order and public security by assisting in cases of natural disaster or other serious calamities. This implicates the right of the Armed Forces to intervene on their own initiative in certain cases when civilian authorities are incapacitated” (Khakee 2009).

The web page of the Parliament of the Republic of Austria provides the following information (2014):

The Austrian Federal constitution determines for the state of emergency special emergency provisions, namely the deployment of armed forces, an emergency decree of the Federal President, an emergency decree of the Federal of the Federal provinces as well as a direct Federal land management by the governor of the province. Emergencies in the face of wars, natural disasters and comparable events pertain as exceptional circumstances. In the course of a state of emergency, the Federal President can modify laws and order certain measures to be taken by emergency decree, can decide to move the seat of the chief organs of the state and the National Council to a different location. The Standing Sub-Committee has a particularly important role to play in exceptional situations – natural disasters or the outbreak of a war: if the National Council cannot meet, the Federal President can issue emergency decrees, but only when proposed by the Federal Government, which in turn requires the approval of the Standing Sub-Committee of the Main Committee.

The constitutional law limits the emergency decree by prohibiting:

- the amendment of Federal constitutional provisions
- a permanent financial burden on the Federal State, the Federal provinces, the municipalities or financial obligation of citizens
- the sale of state property
- measures concerning labour law, social security and insurance act system, Chamber of Workers and Employees, right of association.

Since the Second Republic has been proclaimed, the emergency decree has never been applied (Austrian Parliament (2014)).

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Due to the fact, that crisis and disasters might cross the borders of the federal provinces or the federal state, which require an overall coordination, the national government has the power to coordinate disaster relief (Potyka 2010). On Federal level, the Law on Federal Ministries defines that the Ministry of the Interior is responsible for the coordination of the federal crisis management, governmental Crisis and Disaster Protection and the International Disaster Response (Bossong and Hegemann 2013).

²⁵⁴ [http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-STD\(1995\)012-e](http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-STD(1995)012-e)

According to the principle of a divided administration, relevant legislation for risk and disaster management can be identified at the three administrative levels (Leitgeb and Rudolf-Miklau 2004). In particular, nine legal acts by the state constitute the disaster management framework in Austria.

- Water Act
- Forest Act
- Torrent Control Act
- Water Construction Financing Act
- Disaster Relief Fund Act
- Ordinance on Hazard Mapping
- Guidelines on Hazard Mapping
- Technical Directive for Torrent and Avalanche Control
- Directive for Cost- Benefit- Analysis on Torrent and Avalanche Control Measures

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

According to the general clause of Article 15 (1) of the Federal Constitutional Law, the response to crisis and disasters is primarily a matter of the provinces. Each province is authorized to create appropriate rules and laws on their own (Bußjäger 2003). This means that the Federal provinces are mandated to organize disaster relief services and resources for emergency assistance and disaster relief operations. “In case of local emergencies, regional laws generally foresee official responsibility for relief measures and their management to rest with district administrations or mayors, while major disasters fall under the competences of regional administrations.” (European Commission 2014)

In Austria, nine different laws exist, which take influence of the structure of the Land centres. Civil defence laws regulate how processes, in contrast to normal life, must be organized to minimize the impact of disasters of various kinds. The civil protection laws are on one hand relevant for the affected communities and on the other hand, aid workers, support staff members, finally the authorities themselves. Depending on the country and the possible disaster scenarios, the laws are adopted at various levels. Potyka (2010) indicated that the provinces use different terminologies of disaster, which caused a plurality of the legal scope.

At the level of federal provinces, mainly three laws influence the Austrian disaster management.

- Civil defence Acts
- Areal Planning Regulations
- Building Trade Acts

Due to the executive nature of municipalities, the sphere of disaster management has been shaped by ordinances of the community. Furthermore, at the local level of municipalities and communities the following regulations play an important role (Leitgeb and Rudolf-Miklau 2004):

- Hazard Maps on Torrent and Avalanche Control
- Area planning scheme
- Local development concepts
- Development scheme
- Planning and building permissions

- Alarm and action plans for disasters

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The involvement of voluntary organisations in disaster relief is regulated on the basis of nine provincial laws, which may differ in some kind. However, there is no unified law on that issue. In the case of any damage, caused by a volunteer, the cost must be covered by the Disaster Relief Fund Law on Official Responsibility (Amtshaftungsgesetz), BGBl. Nr. 20/1949 as amended by BGBl. Nr.537/1984) (Austria, 1984).

2.7 Legal regulations for international engagements of first responders and crisis managers

As stated by Potyka (2010), the Federal Ministry of the Interior is the competent authority to coordinate disaster relief in Austria. The legislation does not specify extra procedures for international assistance and Austrian relief. However, bilateral agreements are in place between Germany, Croatia, Liechtenstein, Jordan, Slovakia, Switzerland, Slovenia, Czech Republic and Hungary.

Regarding the regulation for the international deployment of rescue workers, it has been stated by Potyka (2010):

Foreign state aid providers requested by Austria would possibly have to be regarded as employed by the competent Austrian authorities. Furthermore, the Austrian authorities or their legal entities (federation, federal state and community) would generally be responsible and accountable for the actions of these foreign aid providers.

According to the Law Implementing the Aliens Act (No. 188/2005), "nationals of non-EU states are exempted from visa obligations for the length of the transit if they are part of the flight crew or attendants of an emergency or rescue flight or are otherwise active as rescuers in the event of disasters or accidents." Travel Visas will also be granted for relief workers for the duration of three months. Regarding the liability, "foreign state aid providers requested by Austria would possibly have to be regarded as employed by the competent Austrian authorities. Furthermore, the Austrian authorities or their legal entities (federation, federal state and community) would generally be responsible and accountable for the actions of these foreign aid providers." At the moment, law does not specify certain qualifications of the relief workers. The security services are responsible for the safety of relief workers, premises, transport, equipment and goods. It was stated, that some rescue services have "fleet insurance policies" because of the number of vehicles they have.

Potyka indicated that provisions were made for the exemption of import duties for relief supplies and relief items of disaster relief teams. The Federal Ministry of Economics, Family and Youth has to ensure a rapid supply of relief items, simplifying the bureaucratic hindrance. Exceptions of the import and export of medical products are covered by the Narcotic Drugs Act.

3 Organisation

3.1 Organisational chart

The Disaster Management in Austria is organized decentralised with different responsibilities on the various spatial levels. As illustrated in Figure 37, the management of crisis and disasters calls different actors and responsibilities on stage.

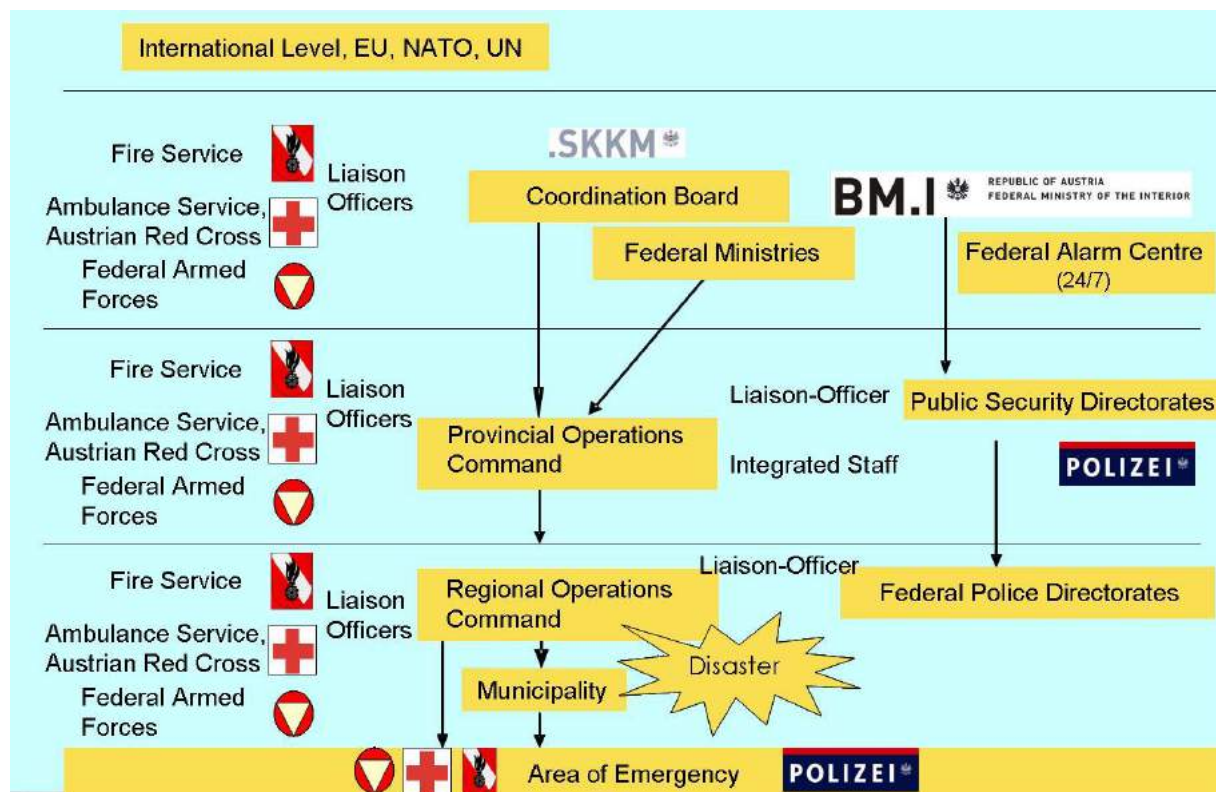


Figure 37: Organizational Chart of the disaster management in Austria

Available at: http://ec.europa.eu/echo/files/civil_protection/vademecum/at/2-at-1.html; accessed: 14th June, 2014.

The Federal Crisis and Disaster Protection Management (SKKM) is located at the Federal Ministry of the Interior (FMI) and acts as a centre for coordinating measurements of authorities and relief organizations in the case of particular hazards, hazardous events and disasters. Chaired by the Executive Vice President of public safety, the council of ministers, where Federal Ministries, provinces and relief organizations are represented, decided to establish an administrative organization for the coordination of public safety - the Federal Crisis and Disaster Protection Management (called SKKM). The responsibility area of the department II/4 of the Federal Ministry of the Interior is divided into National Crisis and Disaster Protection Management (SKKM) and Civil Protection (Federal Ministry of the Interior 2014).

As explained by Jachs (2005), in the frame of the preparation for the World Conference on Disaster Reduction:

At the federal level, a co-ordinating committee was set up for crisis and disaster management. This committee consists of representatives of all ministries, offices of provincial governments,

the major rescue organisations and representatives of media. Similar co-ordinating committees are established at the level of provinces and districts. According to the magnitude of a disaster co-ordination is done by district administrative units, provincial governments or the federal government.

An overview of the composition of the Coordination Committee, chaired by the Federal Ministry of the Interior is provided by Figure 38.

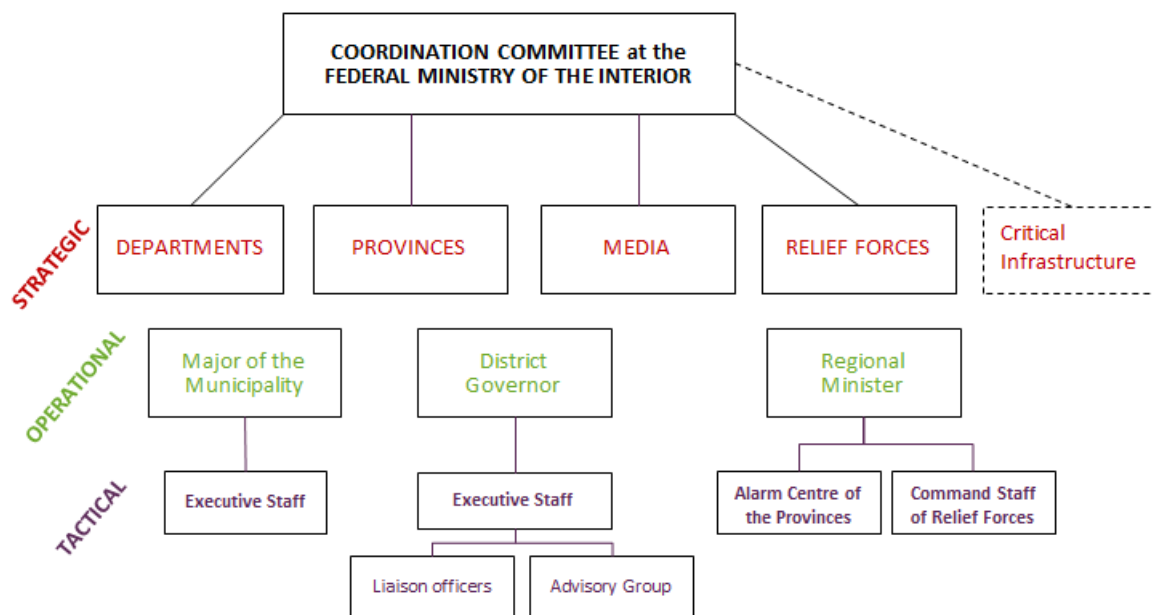


Figure 38: Structure of the Coordination Committee in Disaster Management

Within the Coordination Committee, strategic, operational as well as tactical actors are represented.

The BWZ serves as the central point for the combined warning and alarm system of the Federal Government and the Federal Provinces and is the permanent observatory for the radiation early warning system. It is connected with the information system of the Warning Centres of the Federal Provinces (LWZ), all competent centres on a federal and regional level, the relief and rescue organisations, such as Fire Brigade, Red Cross, Alpine Rescue Organisation, as well as the contact points on a bilateral (neighbouring states), supranational (EU–ERCC), multinational (NATO partnership for peace), and international (UN) level (Federal Ministry of the Interior 2014).

As another step to implement the National Crisis and Disaster Protection Management (SKKM), the provinces assume a strategic part in disaster protection. Measures are managed partly in cooperation with the federation. Each Federal Province has a duty to ensure an efficient disaster protection at the level of district and Federal Province by entrusting appropriate authorities (Jachs 2011a). The disaster relief service of the provinces includes the country's fire brigade association, its institutions and equipment, as well as relief (forces) organizations and personnel resources. The authorities of the provinces operate as the core institutions to manage events; therefore they are featured with special rights for governing the crisis and disaster management. In consequence, every

country has established alerting and warning systems. “Their task is to warn and alert the public in case of imminent danger and to coordinate rescue and relief forces during major disasters.”²⁵⁵ .

As soon as an incident exceeds the capabilities of the local authority, the responsibilities are transferred to the next high level. If an event extends the territory beyond the competence of a municipality, the district authority assumes the role of leading disaster protection authority. The government of the Federal State is called into action if an event cannot be managed with the capabilities of the district level and/or exceeds the political area of the district.

Within reasonable limits, the municipalities have the responsibility to ensure an effective disaster protection. In the case of an event, municipalities are obligated to provide mutual help. Fire brigades have to carry out supporting measures if a certain alert level is reached. Furthermore, the governments of the provinces are authorized to request the assistance of the municipalities for prevention and response activities on district level. Following the principle of subsidiarity, the Mayor of a municipality, the district authority or the government of the provinces are acting as the major authorities for managing the local disaster response.

Based on the coordination approach, the media, especially the ORF as the state broadcasting station, participate at coordination meetings. Mandated with a public service mission, ORF is recognised as a trustworthy source of information about current events. In emergencies, a permanent communication will be established between the EKC and the ORF (also with the APA – the Austrian Press Agency), which will disseminate serious information to the public (Jachs 2011c).

Furthermore, private business is covered within the civil security strategy based on specific regulations. They address certain economic sectors in particular. Especially, for risky or high-vulnerable industries appropriate standards and instructions exist. Each province disaster management law addresses certain regulations. As indicated by Bossong and Hegemann (2013), especially those companies, which are operating hospitals or mines or dealing with dangerous goods, require emergency plans. The strong focus on specific industrial partners has been reflected in the Austrian Programme for Critical Infrastructure Protection. Bossong and Hegemann have illustrated the relationship on the basis of some examples, which will be summarised below. Due to the fact, that the ASFINAG is responsible for tunnel safety and transport issues, a close cooperation with the state-owned infrastructure corporation exists to prevent transport accidents. Also, the ÖBB, as the Federal Railway Company, is integrated in issues regarding the transportation security. The security of the supply chain is amongst others addressed to the power providing company “Verbund AG”, which is a relevant stakeholder in the field of energy security. Last but not least, the ELG – as the Austrian Central Stockholding Entity is considered as a critical infrastructure because it is responsible for the holding of emergency stocks. As illustrated in Figure 38, these four companies – labelled as Critical Infrastructures, will be optionally consulted, if a relevant issue has been raised.

3.2 Organisational cooperation

Within the “National Crisis and Disaster Protection Management Strategy 2020”, it has been defined that the Federal Ministry of the Interior acts as the head of the coordinating body. Chaired by the Director-General for Public Security, the strategic level of the coordination body will comprises of the representatives of the federal ministries, the offices of the Provincial governments and accredited

²⁵⁵ <http://erccportal.jrc.ec.europa.eu/vademecum/at/2-at-4.html>

emergency services, i.e. ARC, ASBÖ, ÖBFV and ÖBRD. Core issues at that level cover an overall information exchange, the definition of strategic action points and fundamental aspects of an emergency. If a cross-border event will require coordination, the Mol is authorized to establish specialist groups by requesting the Austrian Press Agency, the media as well as experts. Legally, cross-border missions are directed by bi- and multilateral agreements of regions, provinces and the state, which define the request and the provision of assistance. Apart from regional agreements between a province of Austria and a neighbouring region or a neighbouring country, the Federal Ministry of the Interior is processing the assistance, i.e. the organisation of the deployment of domestic forces in a third country and vice versa (Expert Interview 2014).

Tactically, the commander of emergency services, i.e. the commander of the fire brigade or the commander of the National Rescue Operations Unit of the Austrian Red Cross, will be able to expand their staff on its own. As it has been stated within the “SKKM Strategy 2020”, the federal structure benefits from an easy access to military forces of the authorities at all spatial levels (2009). Due to the fact, that the disaster management at the national level is based on an interdepartmental cooperation by the superordinate Coordination Committee, several federal ministries are strongly involved in National Crisis and Disaster Protection Management. The Federal Ministry of the Interior is concerned with the strategically processing of assistance interventions, its preparation and execution. The processing of logistic flows, e.g. transport, crossing of borders in the frame of foreign aid and customs matters also lies in its competence area. Furthermore, a permanent communication to other contact points like the NATO, UN and the media is ensured. The preparation of final reports for submission to the Federal Government and the securing of the financing of response activities are required (Jachs 2011b). According to the legislation (listed in 2.4.), the Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW) is the main strategic responsible prevention measures in Austria. As an authority of the BMLFUW, the Federal Forest Engineering Service for Torrent and Avalanche Control together with the technically specialised district authorities at the provincial level fulfil their duties on the community level (Leitgeb and Rudolf-Miklau 2004). The strategic direction of Torrent and Avalanche Control is located at the department III/5 of the Federal Ministry for Agriculture, Forestry, Environment and Water Management. Additionally, the strategic actor is responsible for the planning and the construction of technical and biological measures to protect against natural hazards (Stiefelmeyer and Sattler 2012). Within the management of flood risk, various responsibilities result due to federalist constitution of Austria. By identifying flood-discharge areas and risk zones, the Federal Water Engineering Administration provides expert opinion for the local regional planning and is also engaged in communicating the threat of flooding to the citizens. Departmental cooperation has been established with the Federal Ministry for Agriculture, Forestry, Environment and Water Management (department IV/6) and the offices of the Provincial government. The department IV/5 - Torrent and Avalanches Control, takes the strategically regulation of the protection against natural hazards, e.g. torrents, avalanches, rock falls, mudslides and floods. According to the Austrian Radiological Protection Act and the EURATOM Treaty (Art. 35), Austria is obliged to operate an Environmental Monitoring Network. In the case of exceeding thresholds, the Federal Ministry of Agriculture, Forestry, Environment and Water Management are responsible for the alerting procedure. Therefore, it uses the real-time forecasting system TAMOS, which is also applied at the ZAMG. In Austria, 335 automatically ODL-measurement devices for the measure of the gamma radiation are installed. These systems send status messages to the data centre of the radiation early warning system (BMLFUW, V/7 2009). A part of the disaster relief fund is dedicated for immediate measures

of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. This department is also assigned with the development of appropriate approaches and strategies for preparedness, prevention and mitigation, as well as the coordination of the expert analyses. The supervision of analysis on natural area and the geographical information system NIAS-Forts are core tasks, which the department is responsible for. Research activities are initiated projects in the area of services for torrent and avalanche barriers. As a subordinate agency of the Federal Ministry of Science, Research and Economy, the ZAMG, is a state service for observatories of meteorological, geophysical and air chemistry measurements. The ZAMG has to fulfil substantial statutory tasks and but has also a partial legal personality to act under private law. Flood events concerning the Danube, March and/or Thaya, the "via donau" as an executive body of the Federal Ministry for Transport, Innovation and Technology shares the responsibility with competent offices of the provincial government (BMLFUW 2014c). The "via donau" is a limited liability company, founded by the Austrian Ministry for Transport, Innovation and Technology, entrusted with the administration and preservation of Federal waterways. In addition, the "via donau" is operating the shipping information system DoRIS (Donau River Information Services). In general, the Federal Ministry of Traffic, Innovation and Technology is responsible for events, which focusing on transport accidents, while the Federal Ministry of Health deals with epidemics and the Federal Ministry of Economy, Family and Youth covers mining disasters (Bossong and Hegemann 2013).

Austria has signed international agreements for assistance in disaster situations. The agreements are formal international treaties and include provisions on the responsible agencies, the modalities of border crossing, coordination and command as well as costs and compensation. Cross-border missions are on the one hand directed by European or international legislation and rules of procedures and also by bi- and multilateral agreements of regions, provinces and the state, which define the request and the provision of assistance. The basic provisions of the agreements are largely similar and follow the first agreement signed with Germany. Furthermore, the non-nuclear country Austria has entered into bilateral agreements on nuclear safety with eight countries in Eastern and Central Europe (Bossong and Hegemann 2013). The Federal Ministry of the Interior is coordinating Austria's contribution to international disaster relief assistance in collaboration with other ministries, the federal provinces and emergency services (Jachs 2011b). Apart from regional agreements between a province of Austria and a neighbouring region or a neighbouring country the Federal Ministry of the Interior is also processing the assistance, i.e. the organisation of the deployment of domestic forces in a third country and vice versa (Expert Interview 2014). For this purpose the Mol relies on the established response organizations in Austria and does not maintain specific extra capacities. Modules for EU interventions for instance which were registered at the CECIS are operationally managed by regional fire brigade associations and mobilized upon request of the MOI. Referring to the ANVIL report, Austria had offered international assistance in 59 cases between 2003 and 2010 (Bossong and Hegemann 2013). Due to the fragmented civil security system, assistance is usually provided by various local and state- level actors. There are also some special units that are frequently used for international assistance, such as the Medium Urban Search and Rescue Unit of the Workers Samaritan Association (ASBÖ 2010) and the International Response Team of the Austrian Red Cross (ARC). There Federal Ministry of the Interior (Mol) is authorized to set up crisis teams and act with the Federal Warning Centre as contact point for official requests.

The Mol established efficient communication structures with:

- DG ECHO, Brussels

- NATO - Euro Atlantic Disaster Response Coordination Centre (EADRCC), Brussels
- UNITED NATIONS - Office for the Coordination of Humanitarian Affairs (UN-OCHA), Geneva.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Austria has several generic plans and policies with recommendations on how to deal with disasters. Apart from instructions, checklists or contact directories, there is no overall plan on the national level. It has been explained by Jachs (2005), contingency plans are available for municipalities, districts and provinces. Therein risks have been described, specific measures defined and information about available resources provided. The MoI emphasised, “Disaster management does not work like a recipe” – the persons acting in an event are well educated, have a good grasp and the capabilities to cope with different scenarios. This can be achieved through a comprehensive planning process and continuous training on the job and frequent lessons learned. On the national level, there are only a limited number of plans for large-scale and cross-border events like nuclear emergencies and pandemics. Plans are partly published like the national response plan for nuclear emergencies. As an example, the document “Leading in disaster operations” was published by the MoI in 2006.²⁵⁶ It provides guidelines for staff commanders in the area of situational awareness, leadership, technical equipment, responsibilities, etc. As far as a written procedure already exists, it will be applied (2014). Experiences show, that written procedures are frequently not up to date – they need to be upgraded from event to event. Written plans rather build the basis to evaluate the performance within an event. The building regulation illustrates an exceptional case; in this regulation detailed directions have been stipulated. No extra regulation has been defined the priority-setting in the case of co-occurring events. Due to the clear division of competences on each level, this scenario will not receive particular attention. The Austrian Red Cross frequently participates at the development of standards in the field of humanitarian aid, as well as in drafting operation procedures with a specific focus on threats or intra-organisational tasks and inter-organisational cooperation.

4.2 Operations planning

From a strategic viewpoint, standardisation plays a vital role in improving current procedures and structures. **¡Error! No se encuentra el origen de la referencia.** will provide a short overview on some relevant standards in the area of civil defence, disaster management, etc., mentioned by Jachs (2011b).

Table 8: Overview on some relevant standards in the area of disaster management operations

Standard	Title	Brief description
ISO/DIS 22320	Societal Security – Emergency Management – Requirements for Command and Control	It's a standard about leadership in disaster relief and emergency management as well as for trans-organisational coordination. It is similar to the document “Leading in disaster operations”.

²⁵⁶ The Document “Führen in Katastropheneinsätzen” (“Leading in disaster operations” is available at: http://www.bmi.gv.at/cms/BMI_Service/Richtlinie_fuer_das_Fuehren_im_Katastropheneinsatz.pdf, (only in german); accessed: 21st January, 2014.

ISO/PAS 22399	Societal Security-Guideline for Incident Preparedness and Operational Continuity Management	It is a best practice for emergency prevention and continuity planning.
ÖNORM S 2304	Integrated disaster management	Terms and definitions in the context of the management of disasters, emergencies and crisis; considering interoperability
ÖNORM S 2310	Risk, security and crisis management	Selection and verification criteria for persons appointed for crisis management, disaster prevention, cost reduction
ONR 192320	Crisis and disaster management	Integrated operation control with particular consideration of different management methods, considering cross-border events
ONR 12261-7	Crisis management	Digital exchange of geographic data considering decision making and usage of geo-data for training
IEEE Standard 1512-2006	Incident Management	<ul style="list-style-type: none"> • Emergency Management Centres • Exchange of data about public safety and emergency management • common incident management message sets – Abstract Syntax Notation One ("ASN.1" or "ASN") • Incidents (transportation-related events)

4.3 Logistics support in crises

In Austria's decentralised civil security system, local crisis management agencies and emergency organisation provide the bulk of the necessary logistics (Bossong and Hegemann 2013).

In particular, the Fire Service provides special assets for emergencies. To give an example, the special equipment from a command vehicle is listed here (FEU (2014))

- *“long-term breathing apparatus*
- *protective clothing*
- *power supply units with illumination equipment*
- *evacuation pump units*
- *hydraulic rescue equipment*
- *pneumatic and hydraulic lifting equipment*
- *flame cutters*
- *grinding cutters*
- *chain saws*
- *air compressors with drilling implements*
- *blasting equipment*
- *all kinds of tools*
- *sand bags, etc. “*

In the case of disasters, the federal provinces are authorized to avail resources of individuals and private (logistic) providers for an adequate compensation by a formal decision. Disaster management authorities on each level are legitimated to call for back-up and request personnel or material

resources from the military. Authorities of the provincial governments assign services from designated relief organisations, which are regulated by legal acts of the provinces (Expert Interview 2014).

It has been found out by Bossong and Hegemann (2013):

“There are no specialised independent agencies with an overall mandate for civil security at the federal and regional level. Though private companies are required to observe a number of formal obligations and increasingly participate in some coordination and consultation structures, privatisation and outsourcing do not play a significant role in Austrian civil security.”

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

As it was declared by the BMLFUW (2012), the information policy is a part of the prevention too. The focus is on the self-empowerment and the knowing about hazards by the citizen to promote their self-provision capacities. Facing cross-border crisis and disasters, the Federal State acts as an information hub and a coordinator of wide spreading events, therefore the Emergency Operation and Coordination Centre was established in 2006. The operative element of the National Crisis and Disaster Protection Management (SKKM) is the Federal Warning Centre; it is a permanently manned service location and generates situation awareness in crisis and disasters (Jachs 2011b).

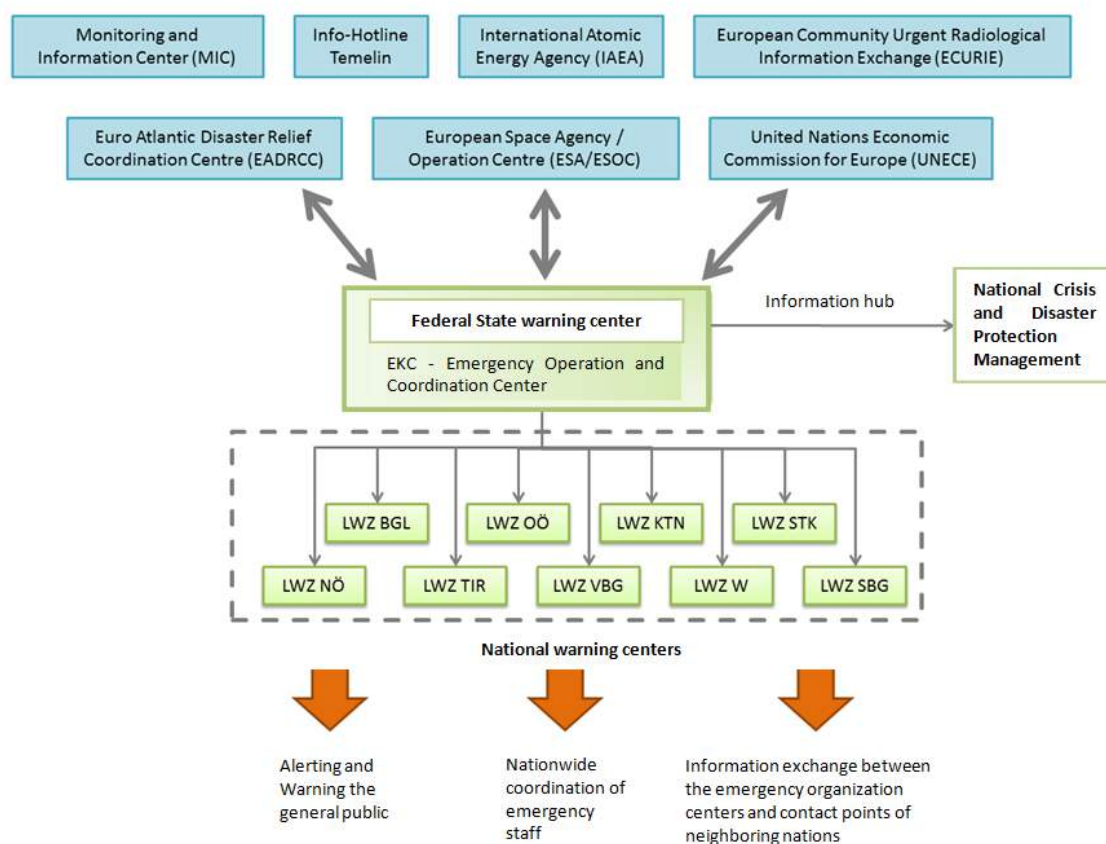


Figure 39: Information flow in disaster situations between the EU and emergency response authorities in Austria

As illustrated in Figure 39, if a large-area event occurs in Austria or its neighbour states, the information will be concentrated at the Federal warning centre, aiming at a rapid communication exchange between authorities inside Austria and foreign warning systems. As contact point for the Info-Hotline Temelin, the ECURIE, the IAEA, the ERCC, the EADRCC and the ESA/ESOC and the Federal warning centres stay in contact with the centres of the countries (Jachs 2011a).

The federal legislator directs the establishment of security centres or warning centres in each province and mandates the development, upgrading and administration of alerting and warning systems to ensure immediately situational awareness. In crisis and disaster case the alert and warning centres (LWZ) acts as a central hub for emergency services by providing appropriate facilities and modern technology. They are responsible to alert and warn the general public in crisis and disaster situations and take regional coordinating actions for their respective countries. Incoming emergency calls are taken by authorized call takers, who have an overview about the available resources and can alert the responsible organization or authority. In 2011, 6.9 billion incoming emergency calls were registered in Austria (Federal Ministry of the Interior 2010). Additionally, their tasks include to link communication between emergency organizations and the neighbouring nations. In the warning and alerting centres of the Federal Provinces, information from various (sensor) systems is merged and registers water levels, wind strength and even radiation levels. They are connected transnationally and enable information exchange beyond national and organizational borders, e.g. information from the Central Institute for Meteorology and Geodynamics, which is Austria's national weather service agency.

5 Capabilities

5.1 Human resources

As explained by Potyka (2012):

However, since disasters have to be remedied in the first place by the persons affected, subsequently also by the local community and the population of the entire region where the disaster occurs, the provinces as well as the municipalities also hold extensive competences in this field. On the local and regional level, the voluntary fire brigades play an important role in combating disasters, both natural and man-made.

In Austria, authorities can draw on approximately 413,000 relief forces in the response to disasters. About 85 percent of the total human resources will be volunteers (BMASK 2009). About 14.2 percent of the volunteers have been actively engaged in disaster relief and rescue service (STATISTIK AUSTRIA 2008). As stated by the research institute in 2013, this means a voluntary resource of 360,000 persons (2013). In 2008, 413,000 Austrians were engaged voluntarily and 37.4 percent of them have been regularly participated in disaster missions, which represented about 1,576 hours per week.

The Fire Brigades (ÖBFV) were considered as an acknowledged, traditional organisation. They assume manifold tasks, including fire-fighting, averting dangers and disaster relief. Their organisation principle is based on the various provincial laws. They are organised locally and are operating on the behalf of the municipalities. Fire Brigades exhibit a high degree of technical know-how.

The ASBÖ is second largest ambulance in Austria. It is concerned with daily routine tasks, i.e. patient transportation as well as with emergency-related task, such as disaster relief, refugee settlement and providing the rescue dog group. The JUH is not represented in all provinces in Austria, but in the capital city Vienna, it is providing emergency aid.

As a special-skilled force, the ÖBRD is mainly concerned with accidents and emergencies in mountain regions. Therein it performs annually about 7,000 missions.

The Christopherus Helicopter Rescue Service, accompanied to the ÖAMTC is another specialized organisation, dedicated to provide quickly help in relief missions. Currently, 250 emergency doctors are joining the CHRS.

The Austrian Red Cross operates internationally and covers 5,600 employees and 51,000 volunteers. On behalf of its mandate, based on the Geneva Convention, it is concerned with the humanitarian aid, disaster relief and, among others, with search-services. As one of the biggest NGOs, it is experienced with cross-border missions. Primary a part of the ARC, in the meanwhile the MHDA has established itself in the field of ambulance service.

The Federal Police Forces will be mainly involved in search and rescue operations, because it is the competence of the police to search for missing persons. In that purpose, the executive body has access to data-bases, where missing persons may be registered.

In order to fulfil their duties in emergency cases, the Austrian Armed Forces are built upon Land Forces, Air Forces and Special Operations Forces (Ministry of Defence and Sports 2014). About 12,500 members of the Austrian Armed Forces can be mobilised in the case of an emergency.

Disaster relief units of the Austrian Armed Forces are composed of volunteers on active service and militia. If needed, civil specialists, i.e. rescue dog brigade, will support them. Specialised forces, such as the CBRN-defence corps, decontamination units, drinking water purification unit or pioneers will be deployed in certain emergencies.

In Table 9, the personnel resources of the most important relief forces are listed (Multiple sources were used to develop this overview: BMASK 2009, FreiwilligenWeb 2014, Wikipedia 2014, Jachs 2011b)

Table 9: Overview on relief personnel for emergencies in Austria

Stakeholder Type	Name	Number of Personnel
Emergency Organisation	ARC	48,500
	ASBÖ	3,879
	CHRS	250
	ÖBRD	11,420
	JUH	590
	MHDA	970
	ÖRHB	724
	ÖHR	298
	ÖBFV	249,000
	Team Austria	33,000
Federal Security Authority	Federal Police Forces	27,000
Governmental unit	Austrian Armed Forces	12,500

5.2 Materiel (non-financial) resources

Especially for radiological emergencies, the federal state established prevention measures by storing potassium iodide tablets, livestock and some useful items. A total of 5 million packages of potassium iodide tablets are available at schools, hospitals, pharmacies and occupational doctors.

PHAGO pharmaceutical wholesalers maintain a stockpile of over 50,000 pharmaceutical products to guarantee Austria's full supply of pharmaceutical products even during emergencies.²⁵⁷

Furthermore, about 300,000 tablet packages are stored at the Federal Ministry of the Interior. By an order by the Ministry of Health the tablets will be distributed for free²⁵⁸. For an emergency case, the "Lebensmittelbewirtschaftungsgesetz" regulates the structure and the distribution of food reserves in Austria (AMA 2014). The Federal Minister of Agriculture, Forestry, Environment and Water Management is authorised to set all necessary measures to avoid supply problems. This may include

²⁵⁷ Information is available at: <http://www.phago.at/en/services/stockpiling/>; accessed: 12th October, 2014.

²⁵⁸ Information is available at: <https://www.kommunalnet.at/news/artikel/article/atमारर-super-gau-was-muessen-gemeinden-im-notfall-tun.html?cHash=f21f743b5bf6c5f422e0ad98b9c1e636>; accessed: 11th March, 2014.

the seizure of goods, the expropriation of goods as well as prohibitions and requirements regarding the use of foodstuffs. Furthermore, the Federal Minister of Agriculture, Forestry, Environment and Water Management can instruct and authorise the governors of the provinces with extensive powers. He or she can also assign the public body of the Agrarmarkt Austria with the handling of food reserves. Appropriate prevention measures have been also defined in the “Lebensmittelbewirtschaftungsgesetz”. Municipalities will have the right to make use of registration data according to the Reporting Act. According to IAEA (2014), the Austrian Central Stockholding Entity (ELG) held an emergency oil stock of about 3.0 Mt (99 days of net imports).

In Austria, emergency stocks are not held separately from commercial stocks – all oil products held by ELG are commingled stocks. The legal framework for Austrian emergency management is the Energy Intervention Powers Act (Energielenkungsgesetz 2012) and the Stockholding Act (Erdölbevorratungsgesetz 2012). Within the review it was stated, that in 2011, a total storage capacity in Austria stood at 6.6 mcm, or around 42 mb of crude oil and oil products. The storage capacity is almost evenly distributed between crude - 53 percent (3.5 mcm) and 47 percent oil products. As identified by IAEA (2014), Austria does not have government stocks on gas, nor does it place an obligation on its suppliers to hold natural gas reserves. In the case of disasters, the Military exhibits a rapid response capacity by mobilising a high amount of personnel. Apart from their availability, their special skills concerning technical know-how, i.e. water purification, CBRN defence capacities and the provision of specialised assets, i.e. the Landesbrückengerät (bridge building devices).

5.3 Training

Training is not organised centrally but authorities and response organisations at each level offer specialised education programs according to their specific focus (2014). Austria for instance has nine fire-fighting schools in the provinces. The qualification of fire fighters is regulated by specific curricula. The qualification of personnel in emergency medical services is regulated by a national law, i.e. the paramedic law, which also provides for certification. Governmental authorities also have their internal training system. The Ministry of the Interior furthermore offers specific leadership training in its security academy. In this frame the Ministry organizes different training courses for high-level decision makers. Voluntary participants will be acquainted with theoretical basics as well as with practical principles of leadership. Within the SKKM Strategy 2020, a four-part module-based training programme has been defined (Federal Ministry of the Interior 2009). Officials of an authority and the top-level managers of an emergency service will be provided with an introduction to the legal framework of the disaster management. These insights should build the basis for the second module – leadership in disaster missions. Targeting staff members, as a high-sensitive issue, crisis managers will be trained in a module about the risk and crisis communication. Finally, the module “Risk analysis and Disaster Protection Planning” is dedicated to provide an initiation into risk analysis, focusing on natural hazards. Furthermore, the Federal Ministry of the Interior coordinates the participation at European training programmes and delegates also national experts.

Until now, Austria has completed eight modules of the European Union Modules.

5.4 Procurement

5.4.1 Procurement regulation

Procurement of crisis and disaster management assets is not centralized but the relevant actors on different administrative levels do it. Austria does not acquire specialised equipment for international disaster management but uses available resources (Expert Interview 2014). After a formal request for assistance the Federal Ministry of the Interior usually coordinates the provision of relief goods. Given this fact there is currently no explicit national position on this issue which could be mentioned in this context. Procurement is generally done in accordance with existing national and supranational legislation depending on the deliverables needed.

At the moment, the provision of assistance after the request of a foreign country frequently includes the availability of personnel and material resources. In any case, a strict statutory regulation will be required to regulate such legal aspects.

In Austria, procurements of the MoD is in compliance with the Public Procurement Law and the Federal Defence and Security Procurement Act. The first one implements Directives 2004/17/EC, 2004/18/EC and 2007/66/EC and “therefore covers the legal framework for the award of both public contracts from public entities and entities operating in the water, energy, transport and postal sectors (“sectoral entities”)” (EDA 2014). In addition, procurement of specific defence products and services is regulated by the Federal Defence and Security Procurement Act, which implemented Directive 2009/81/EC. Both federal laws are applicable for purchases above certain thresholds and for those below such thresholds.

Several types of procedures were identified by Stalzer (2014):

- Open procedures
- Restricted procedures (with and without prior notice)
- Negotiated procedures (with and without prior notice)
- Direct Award
- Direct Award with prior notice
- Competitive dialogue
- Dynamic purchasing systems
- Electronic Auction
- Design and Realisation contests
- Framework Agreement

In general, the procurement procedure undergoes three phases:

- Prior information notice (information about planned purchase)
- Announcement of request for tenders
- Announcement of awarding of contract (Announcement have to be published in the media)

As stated by Liebmann (2014), “restricted procedure and negotiated procedure, both with prior notice, are the standard in terms of the upper threshold. Contracting authorities can freely choose between the two procedures. In certain cases, for example negotiated procedure without prior notice, competitive dialogue and direct award are also available.” There was a critical note concerning the limiting measures for EU purchasing markets, which could cause retaliatory measures of third states. In 2011 it was emphasised, that new laws should not limit the contracting body’s

freedom of decision-making or the national procurement law. Currently, only few applicants from third states have been taking part in Austrian procurement process is only. An implementation in the case of an imminent danger might be difficult (Statement from the Federal Republic of Austria on the access of third states to public procurement 2011).

5.4.2 Procurement procedures

It was stated within the report of the OECD (2007) that Austria has a semi-centralised structure of Public Procurement, consisting of the national and the sub-national level. The Austrian Federal Procurement Act (Federal Act Governing the Award of Contracts, 2006) and the public procurement laws of the Federal Provinces regulate the public procurement.²⁵⁹

Figure 40 illustrates the Structure of the Austrian public procurement system.

Structure of the Austrian public procurement system

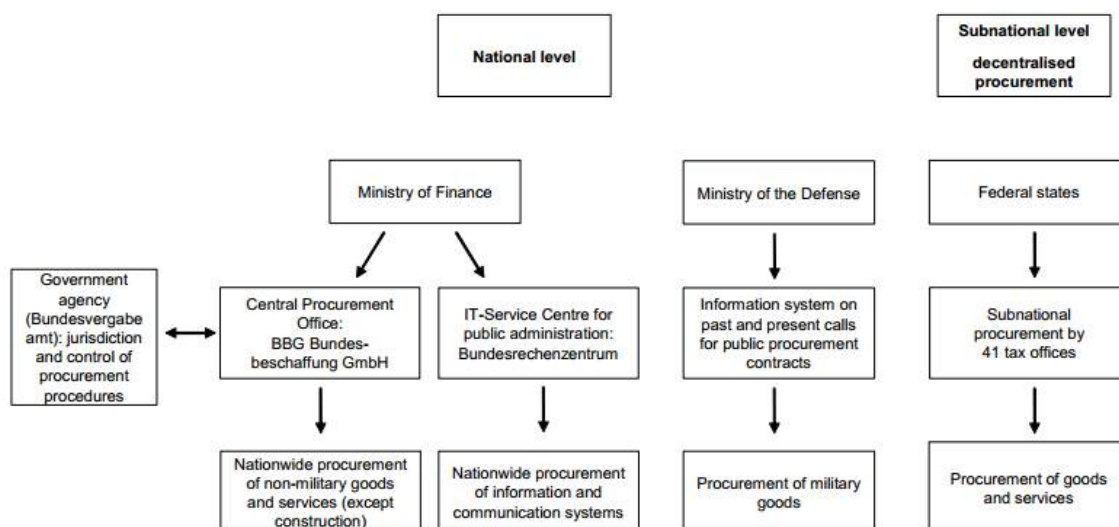


Figure 40: Structure of the Austrian Public Procurement System

Available at: ftp://ftp.cordis.europa.eu/pub/innovation-policy/studies/2_austria.pdf; accessed: 30th November, 2014.

At the national level, the Ministry of Finance, the Ministry of Defence and Sports and the Government Agency for Public Procurement are the responsible bodies for procurement. The Ministry of Finance is responsible for preparing public procurement rules, regulations and legislation. As sub-ordinated bodies of the Ministry of Finance, the Public Procurement Agency as the Central Procurement Office and the IT-Service Centre for public administration are fulfilling the tasks of nationwide procurement of non-military goods/services and information/communication systems. By establishing the Public Procurement Agency on the basis of the Law to establish the National Public Procurement Agency in 2001, the structure became more centralised. The Government agency for public procurement is dedicated to control and to rule upon public procurement procedures at the federal level. It is the competent authority “to rule upon publish procurement procedures conducted by public entities which fall within the competence of the provinces, cities and municipalities (Structure of the Austrian public procurement system n.d.). The Ministry of Defence is responsible for

²⁵⁹ An overview on laws concerning public procurement is provided at: <http://www.bundestkanzleramt.at/site/5100/Default.aspx> (only in German); accessed: 29th November, 2014.

the procurement of military equipment (goods). An information system on past and present calls for public procurement contracts was established at the MoD. Finally, at the sub-national level, the provinces are the competent bodies for the procurement of goods and services. Additionally, the Austrian Register of Tenderers (AKNO) acts as an information interface between contractors and contracting bodies. The contract award portal of the Austrian Register of Tenderers contains all Austrian disclosures made by the Federal Government, the provinces and municipalities, all invitations for tenders from the supplement of the Official Journal of the European Union and selected invitations for tenders from Eastern Europe. From a strategic viewpoint interoperability is important to differentiate between relevant areas of interoperability. Interoperability can be related to technical standards but also to rules of procedure and management aspects (Expert Interview 2014). Of course there is a need for Austria to collaborate towards organisational and national borders on all levels like the strategic, operational and tactical level and therefore systems and procedures need to be compatible to a certain degree. Nevertheless it should not be disregarded that an efficient disaster management across borders has to rely on self-sufficient resources as foreseen on European and international level (Expert Interview 2014).

5.5 Niche capabilities

Austria possesses a considerable knowledge in the area of prevention and preparedness for natural, specifically alpine hazards, which might be exemplarily. The same applies to the capacity of volunteer work and the self-initiative of the civil society, which are very well established. About 431,000 volunteers, who are in some cases specially trained, contributes very well to the resilience of the Austrian society in cases of emergency. In particular, the involvement of convergent or spontaneous volunteers within the project “Team Austria” of the Austrian Red Cross and the Ö3 radio broadcasting might be considered to be a best practice model. Current figures estimate the personnel resources of Team Austria with about 30,000 individuals. The Mol emphasised, that from a technical perspective, knowhow in drinking water purification also outlines a special skill of Austria which has been proven in several international operations (2014). Furthermore, similar to Germany, highly regarded experiments in mountain rescue have been performed in Austria. Bossong and Hegemann (2013) have indicated, that the “strong but contested domestic role of the military,” as well as the well-established national security research, should be acknowledged as important capabilities. Apart from that, the already mentioned well-functioning early warning system and the well-developed warning infrastructure with over 8,000 sirens should not be disregarded. Due to the fact, that not the whole society is as technophile, by sirens the alerting in emergencies can be ensured.

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The interview partner from the Federal Ministry of the Interior has stipulated to integrate the following note: *“The statements, interpretations, and conclusions expressed in this interview do not necessarily reflect the views of the Federal Ministry of the Interior, the Federal Government, or the Republic of Austria.”*



Driving Innovation in Crisis Management for **E**uropean **R**esilience

BELGIUM

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Linette de Swart, Rachel Beerman)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by AIT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In Belgium, a distinction is made between emergency situations that arise as a result of a local/provincial/national crisis and those that arise as a result of an international crisis. A national crisis has its origins and effects on the Belgian national territory, and thus will be managed nationally. Crisis management in Belgium is organised at three levels, the mobilisation of which depends on the magnitude of the incident: These are the (i) municipal level, under the responsibility of the mayor; (ii) provincial level, under the responsibility of the provincial governor; and (iii) federal level, under the responsibility of the Ministry of the Interior.

A Belgian national crisis is first tackled at a local municipal or provincial level, before it is coordinated at the national level. If the magnitude exceeds the provinces' abilities, the national crisis organisations step in and act as crisis coordinator (operationally managed via numerous departments and operational units, falling under control of the Minister of Interior Affairs). Fire services and the civil protection services of the DG Civil Security together form the emergency intervention services on the operational response side, organised into 32 emergency rescue zones as per 1 January 2015. Civil protection forces are organised on the Federal level and act on federal, provincial and municipal requests.

Key stakeholders are the municipal level (Mayors), the Provincial level (Governors) and the Federal level (Minister of Interior Affairs and supporting DGs, namely DG Crisis Centre, DG Civil Security, DG Security and Prevention; Federal Knowledge Centre; Red Cross; B-FAST, etc).

International crises in Belgium are generally managed within the framework of multilateral organisations. The Belgian civil protection agency has a unique structure for international emergency assistance in the interdepartmental B-FAST teams, comprised of civil protection services from the Federal Public Services (FPS) Interior Ministry, as well as FPS Public Health, FPS Foreign Affairs and the Ministry of Defense. B-FAST is also deployed in the case of emergencies originating in Belgium but having effects outside its borders.

Table of Contents

BELGIUM Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	271
Overview.....	272
Table of Contents	273
List of Figures	276
List of Tables.....	276
List of Abbreviations.....	277
1 Policy	278
1.1 Risk Assessment	279
1.2 Policy and Governance	280
1.2.1 Strategy scope and focus.....	281
1.2.2 Monitoring and analytical support to policy making; R&D	281
1.2.3 Policy for Prevention	282
1.2.4 Policy for Preparedness	284
1.2.5 Policy for Response	284
1.2.6 Policy for Relief and Recovery	285
1.3 Financing	286
1.3.1 Investing in preparedness and prevention.....	286
1.3.2 Investing in consequence management.....	288
1.4 Policy review, Evaluation & Organisational Learning	289
1.4.1 Post-Disaster Assessment.....	289
1.4.2 Departmental Lessons Learned systems	289
1.4.3 Centralised (national) Lessons Learned system	289
1.4.4 International exchange for Lessons Learned.....	289
1.4.5 Regular policy reviews	290
1.5 Resilience	290
1.6 Information sharing and data protection	291
2 Legislation	292
2.1 Crisis (emergency, disaster) management concept.....	292
2.2 General crisis (emergency, disaster) management law	292
2.3 Emergency rule	294

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	294
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	294
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	296
2.7	Legal regulations for international engagements of first responders and crisis managers	297
3	Organisation	298
3.1	Organisational chart	299
3.2	Organisational cooperation	310
4	Procedures	312
4.1	Standing Operating Procedures (SOPs) and Guidelines	312
4.2	Operations planning	313
4.3	Logistics support in crises	314
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	314
4.4.1	Internal communication	314
4.4.2	External communication	315
5	Capabilities	317
5.1	Human resources	317
5.2	Materiel (non-financial) resources	318
5.3	Training	319
5.4	Procurement	322
5.4.1	Procurement regulation	322
	European regulations	322
5.4.1.1	Scope of the public sector directive	323
5.4.1.2	Award procedures	323
	<i>National regulations</i>	325
5.4.1.3	<i>Scope</i>	325
5.4.1.4	<i>Procedures</i>	325
5.4.1.5	<i>Award criteria</i>	325
5.5	Niche capabilities	325
	Resources	327
	Legislative acts	327
	Other normative acts	327
	Official documents (white papers, strategies, etc.)	328
	Online resources (e.g. websites of key CM organizations)	328

Publications	331
Expert interviews	332

List of Figures

<i>Figure 1: Map of communities and regions of Belgium</i>	<i>278</i>
<i>Figure 2: Flowchart on the procedure for recognizing payments under the calamity funds.....</i>	<i>286</i>
<i>Figure 3: Example of a recent campaign targeted at young Belgians. Financed by the Seveso fund</i>	<i>290</i>
<i>Figure 4: Map of new emergency rescue zones in Belgium.....</i>	<i>296</i>
<i>Figure 5: Belgian's Federal crisis coordination</i>	<i>299</i>
<i>Figure 6: Main Belgian federal civil protection organizations.....</i>	<i>301</i>
<i>Figure 7: DG Civil security of the Federal Public Service of the Interior Affairs</i>	<i>303</i>
<i>Figure 8: Organisation of the Directorate of Operations under DG Civil Security</i>	<i>304</i>
<i>Figure 9: Map of operational civil protection services units.....</i>	<i>304</i>
<i>Figure 10: Federal crisis management bodies.....</i>	<i>308</i>
<i>Figure 11: Crisis management plans</i>	<i>314</i>
<i>Figure 12: BASF's new fire truck, co-financed by the Ministry of Interior affairs</i>	<i>318</i>
<i>Figure 13: Training in the new Diabolo tunnel under Brussels Airport.....</i>	<i>320</i>

List of Tables

<i>Table 1: Summary of Natural Disasters, human impact and economic damage (1980-2015).</i>	<i>279</i>
<i>Table 2: Budget Expenditures of MoI on crisis management, 2011-2012 (in ,000€)</i>	<i>287</i>
<i>Table 3: Five disciplines operational crisis management</i>	<i>305</i>
<i>Table 4: Staff of most relevant crisis institutes (as per 1 September 2014)</i>	<i>317</i>

List of Abbreviations

B-FAST	Belgian First Aid and Support
BELINTRA	Belgian Intervention System for Transport Accidents
CIC-C101	Communications and Information Centres
CGCCR	Coordination and Crisis Centre of the Government
CPND	Commission of National Defence Matters
DICa-DIR	Contingent for Relief Operations Abroad
DG	Directorate General
EC112/100	112/100 Emergency Centres
FPS	Federal Public Services
FRISK	Federal Risk Inventory, Survey and Knowledge Building
GRIMP	Group for rescue and intervention at difficult places
HNS	Host Nation State
IBZ	Ministry of the Interior
INSARAG	International Search and Rescue Group of the UN
IPSU	Higher Institute for Emergency Planning
KCCE	Federal Centre of Expertise for Civil Protection
MIC	Maritime Information Node
MRCC	Maritime Safety and Coordination centre
OCAD/ OCAM	Organ for Coordination and Analysis of Threats (in Flemish / in French)
PGUI	General emergency and response plans (In French, Le plan général d'urgence et d'intervention)
PPUI	Specific emergency and response plans (in French, Le plan particulier d'urgence et d'intervention)
PUI	Multidisciplinary emergency and intervention plans (in French)
RD	Royal Decree
Regetel	Réseau gouvernemental de Télécommunications, or Governmental Telecommunications Network
SOP	Standard/Standing Operating Procedure
TETRA	"TErrestrial Trunked RAdio

1 Policy

Belgium operates under a federal parliamentary democracy under a constitutional monarch. The key actors in the federal government are the Prime Minister and the Ministers. Through a series of constitutional revisions from 1970 to 1993, Belgium devolved into a federal state comprised of federal, regional and community institutions, entailing a complex division of responsibilities.²⁶⁰

Belgium has three region (i.e., Walloon, Flanders and Brussels, the capital) and three linguistic communities (i.e. French, Flemish and German). The regional areas are administrated on, e.g. economic, industrial and environmental issues, while the linguistic communities administer in areas mainly related to their respective language, e.g. education and media.

Belgium has 10 provinces, each of which is led by a governor that presides over a provincial council. The local government level is made up of 589 municipalities, each of which is led by a mayor presiding over a municipal council.²⁶¹

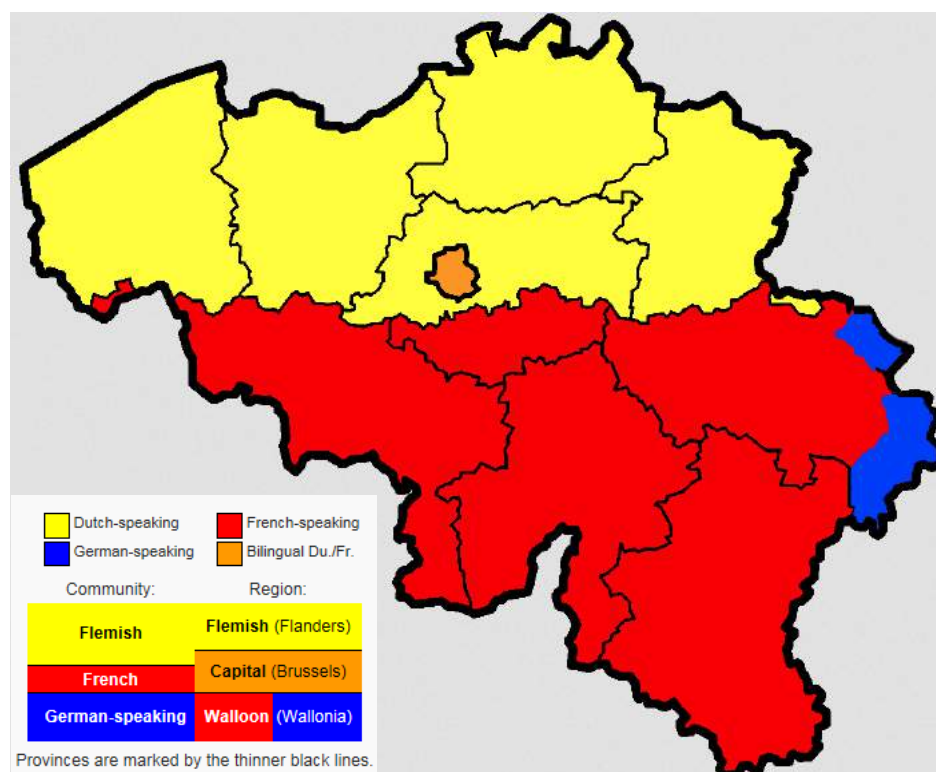


Figure 41: Map of communities and regions of Belgium²⁶²

²⁶⁰ "Belgium - Disaster management structure," European Commission - DG ECHO Civil Protection Vademecum, accessed 20 December 2015, http://ec.europa.eu/echo/files/civil_protection/vademecum/be/2-be-1.html.

²⁶¹ Swedish Civil Contingencies Agency (MSB), "Belgium," in *International CEP Handbook. Civil Emergency Planning in the NATO/EAPC Countries*, ed. FN LN et al. (City: Publisher, 2009), 33-34.

1.1 Risk Assessment

Due to the geographical terrain of the country, the main natural disaster risk in Belgium is flooding, particularly along rivers and in areas of reclaimed coastal land, which are protected from the sea by concrete dikes. Nuclear risks are another important threat, given that the Belgium's energy supply depends on nuclear power for more than 50% of the country's energy resources.²⁶³ Other threats include Seveso and contagious animal diseases.²⁶⁴

The Ministry of Interior Crisis Centre of Belgium and its partners identify the following priority risks:

- Flooding
- Nuclear risks
- Seveso risks
- Contagious animal diseases
- Vital Interests of the country
- Pipelines
- Terrorist threats²⁶⁵

The relevance of the risks being designated as “priorities” is that annual planning focuses first on these risks when drawing up plans.

Table 10 summarises the record of natural disasters over the last 35 years (1980 to 2015), including their human and economic impact in Belgium.

Table 10: Summary of Natural Disasters, human impact and economic damage (1980-2015).²⁶⁶

Type of disaster	No. Events	No. Killed	Total affected (1)	Damage (000 USD)
Earthquake (ground movement)	2	2	1030	\$150,000
Extreme temperature (2)	6	2121	-	-
Flood	21	28	4975	\$1,345,146
Storm	15	15	978	\$ 764,986
(1) Refers to Sum of injured, homeless, and affected (People requiring immediate assistance during a period of emergency; it can also include displaced or evacuated people).				
(2) Includes cold waves and heat waves				

²⁶² Wikipedia, “Communities, regions and language areas of Belgium,” accessed 20 December 2015.

²⁶³ Belgium has seven nuclear reactors generating jointly about half of its electricity needs.

²⁶⁴ “Country Profile – Belgium” European Commission - DG ECHO Civil Protection Vademecum, accessed 20 December 2015, http://ec.europa.eu/echo/files/civil_protection/vademecum/be/2-be.html.

²⁶⁵ “Belgium – Emergency planning,” European Commission - DG ECHO Civil Protection Vademecum, accessed 20 December 2015, http://ec.europa.eu/echo/files/civil_protection/vademecum/be/2-be-2.html.

²⁶⁶ EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be - Université catholique de Louvain - Brussels – Belgium.

The DG Crisis Centre under the Ministry of the Interior (described in 3.1) has developed a risk inventory through which it can continuously monitor and analyse risks as objectively as possible. This inventory is called the Federal Risk Inventory, Survey and Knowledge Building (FRISK).²⁶⁷ The data and information collected is based on inputs of different sources of information and warnings from civilians and professionals (Mayor, Governor, DG Civil Security and Police).

1.2 Policy and Governance

In Belgium, a distinction is made between emergency situations that arise as a result of a local/provincial/national crisis and those that arise from an international crisis. A national crisis has its origins and effects on the Belgian national territory, and thus will be managed nationally, whereas an international crisis tend to find their roots beyond Belgium's borders and are generally managed via a political and/or military framework, such as the Belgian First Aid and Support (B-FAST).²⁶⁸

Crisis management in Belgium is organised at three levels, the mobilisation of which depends on the magnitude of the incident: These are the (i) municipal level, under the responsibility of the mayor; (ii) provincial level, under the responsibility of the provincial governor; and (iii) federal level, under the responsibility of the Ministry of Home Affairs.

A Belgian national crisis is first tackled at a local municipal or provincial level, before it is coordinated at the national level. If the magnitude exceeds the provinces' abilities, the national crisis organisations step in and act as crisis coordinator (operationally managed via numerous departments and operational units, falling under control of the Minister of Interior Affairs).

Municipal phase

If the crisis does not exceed the municipal level, the mayor is in charge of the crisis emergency planning. He reports to the governor of the concerned province.

Provincial phase

If the crisis' magnitude exceeds the boundaries of one municipality, then the governor of the province is in charge. He reports to the Minister of Internal Affairs.

Federal/National phase

When the magnitude exceeds two or more provincial boundaries and the means available to the provincial governor within his/her competence of coordination are insufficient, the Minister becomes responsible for implementing the phase.

²⁶⁷ "Analyse du risque," Belgium Ministry of the Interior, DG Crisis Centre, accessed 20 December 2015, <http://centredecrise.be/fr/content/analyse-du-risque>.

²⁶⁸ MSB, "Belgium".

All levels are responsible for emergency planning in their respective territories.²⁶⁹

1.2.1 Strategy scope and focus

The strategic approach to crisis management in Belgium covers all necessary activities for prevention, preparedness, response (including resilience) and relief and recovery. Article 11(2) of the Law on Civil Security of 15 May 2007 states that prediction, prevention, preparedness, execution and evaluation are all integral to the tasks of the operational civil security emergency services (comprised of the Civil Protection intervention services and the fire departments).

1.2.2 Monitoring and analytical support to policy making; R&D

Analytical support is provided to the civil protection services via two institutes: (i) the Higher Institute for Emergency Planning (IPSU), which is embedded within the Coordination and Crisis Centre of the Government (CGCCR) and (ii) the Federal Centre of Expertise for Civil Protection (KCCE), a separate service within the DG Civil Security of the Ministry of the Interior.

The **Higher Institute for Emergency Planning (IPSU)** was first established in 1991 by the Royal Decree of 29 July 1991. In 2003, IPSU was integrated into the CGCCR. This institute is responsible for sharing information on the multidisciplinary and strategic aspects of crisis emergency planning and to support the evolution of the CGCCR into a “knowledge centre of emergency planning for all crisis managers,” including “at the federal and local levels, in the private and public sectors, and in the military, policing and civilian fields”.²⁷⁰ It is tasked with maintaining a close link with academic experts in crisis management.

The main activities of the Institute are:

- (i) [to spread] information via the organisation of specific trainings, brochures and participating at other initiatives;*
- (ii) [to stimulate] the exchange of ideas for internal and external emergency planning among the diverse authorities and industry;*
- (iii) [to inform] workers on necessary precautions with respect to health risks regarding interventions. This takes place in close cooperation with the Directorate General for Civil Security.²⁷¹*

Examples of research projects organised by IPSU include²⁷²:

²⁶⁹ “Disaster management structure,” DG ECHO.

²⁷⁰ “Emergency Planning,” DG ECHO.

²⁷¹ Ibid.

²⁷² “Research and Networks,” Ministry of the Interior, DG Crisis Centre, accessed 20 December 2015, <http://centredecrise.be/fr/content/recherches-et-reseaux>.

- “The role of the mayor during the Emergency Management ” (2011) to clarify the specific role of the mayor in an emergency situation. The output was a publication which contains a collection of experiences and best practices on planning and emergency situations.
- “Research on monitoring disaster victims” (2011)
- “The practice of evacuations” (2009) to analyse both legal and practical aspects of evacuation. The output included the development of practical tools to facilitate a rapid and effective response during actual events.

IPSU also participates in European research projects, such as²⁷³:

- ERGO (2009), Evacuation Responsiveness by Government Organisations
- Disaster 2.0 (2012), a research project on the use of web 2.0 and web 3.0 applications in the field of crisis management.

The Federal Centre of Expertise for Civil Protection (KCCE) was established on 28 March 2007 and is embedded within the Federal Public Service (FPS) Interior Affairs. The centre is tasked with collecting information on civil security with the aim to improve the quality of their services and to stay up to date on the latest standards. In terms of specific support to policy-making, the centre plays a key role in the development of Standard Operating Procedures (SOPs), discussed in section 4.1.²⁷⁴

1.2.3 Policy for Prevention

Prevention is institutionalised via the DG Security and Prevention falling under the Ministry of Interior Affairs. The main task of DG Safety and Prevention is to contribute to the safety of Belgian civilians, via intense cooperation with a network of partners, enforcing specific safety and security legislation including the responsibility of giving sanctions in case of non compliance and last prevention (fire and burglary for example) specifically aimed at civilians.

The DG consists of eight units²⁷⁵:

1. Fire safety²⁷⁶
2. Control of private security
3. Litigation and legal support
4. Comprehensive local safety / security
5. Police management²⁷⁷

²⁷³ Ibid.

²⁷⁴ “About Civil Security,” Ministry of the Interior, DG Civil Security, accessed 20 December 2015 <http://www.securitecivile.be/en/content/about-civil-security>.

²⁷⁵ DG Security and Prevention, accessed 20 December 2015, <https://www.besafe.be/fr/public-cible>.

²⁷⁶ The unit supports the regulatory framework development for all buildings, including structures, building materials and equipment, for all buildings except single family dwellings, and ensures its implementation.

²⁷⁷ According the DG Security and Prevention website, the Directorate Police Management “supports the management of 195 police zones. It ensures the management of different materials for the operation of areas such as legislation on finance and accounting, appointment procedures and evaluation of the commanding officer, the appointment and revocation proceedings superior officers and disciplinary procedures with regard to unit commanders and senior officers. In addition, police Management Department acts on behalf of the

6. Private security
7. Football unit
8. Radicalism unit.

The DG supports the Ministry of Interior affairs and prepares measures and plans to limit damage in case of an emergency. Therefore the Department also invests in research on preventions. The Department specifically organises prevention via three funds targeted at risk prevention (IBZ, 2014):

- Seveso Fund²⁷⁸
- Nuclear Fund
- The fund/council for protection against fire and explosions

These funds are discussed under 1.3.1.

The Royal Decree of 19 December 2014 “determining the organization of the fire prevention in the emergency rescue zones” sets out the main tasks of fire prevention, namely to sensitize, provide advice and control.

*First the zones need to inform and sensitize the citizen regarding the possible dangers. They do this amongst other things through prevention campaigns, information sessions and open days. Besides sensitizing, the zones also need to provide fire prevention advice. That advice is always without obligations. Citizens, architects, authorities, ..., can ask for specific information. Fire prevention controls only take place in the framework of a potential action of the authorities or in preparation to a decision of an authority such as granting a permit or closing down a building. The emergency rescue zones also have to draw up an action plan in which they mention their future fire prevention initiatives and determine their policy. The action plan is tuned to the framework policy document of the FPS Home Affairs.*²⁷⁹

The importance of such campaigns is evidenced by the 2010 National Fire Prevention Plan campaign of the DG Security and Prevention. This plan was identified as a best practice in prevention due to the large approach to the general public and communication via social media. (IBZ, 2014)

- Civilians were made aware of the fire risks and fire prevention measures via a website <http://www.ismijnwoningbrandveilig.be> and via social media. These prevention measures focus on installing a smoke detector, investing in fire equipment (blankets and extinguishers), avoiding the use of stand-by mode for electronic equipment etc.
- The government made available funds to train fire prevention advisors. These are equipped with a trolley to support them in giving lectures. The trolley contains smoke detectors, fire blankets, fire proof building materials etc. In November 2010, 87 advisors were active in 28 operational zones (steered via the local fire fighters).

Minister of the Interior, the specific supervision of the decisions taken by the police boards and local councils on the policy plan.”

²⁷⁸ “Seveso Funds,” accessed 20 December 2015, <http://www.seveso.be/content/seveso-funds>.

²⁷⁹ “Reform,” Ministry of the Interior, DG Civil Security, accessed 20 December 2015, <http://www.civieleveiligheid.be/en/content/reform>.

1.2.4 Policy for Preparedness

The key actor is the DG Crisis Centre of the FPS Interior Ministry. Ministers are responsible for emergency planning in their area of competence, and all levels of government (i.e. municipal, provincial, national) are responsible for emergency planning in their respective territories. The CGCCR is tasked with organising proactive emergency planning. Contingency plans for emergency protection, rescue and relief are drafted on the basis of input from IPSU. The knowledge on crisis management is also updated by the KCCE. The process for drafting emergency plans is discussed in section 4.1.

In an official statement at the Third UN World Conference on Disaster Risk Reduction (WCDRR) in Sendai, Japan (March 2014), the First Counsellor of the Permanent Mission of Belgium, Mr. Christophe de Bassompierre states, as evidence of Belgium's commitment to preparedness:

During its Presidency of the Council of the EU, Belgium has developed the principle of "Host Nation Support"(HNS), with regard to receiving assistance during a major emergency. It principally consists in preparing, on the territory of States which have experienced a disaster and asked for international assistance, the on-the-spot integration of international teams mobilized in order to support them. In the same way, Belgium is very active in the organization of large-scale European civil protection exercises.²⁸⁰

1.2.5 Policy for Response

A crisis is managed at the municipal, provincial or national level depending on a number of criteria, i.e. geographical scope, number of victims, environmental and/or economic impact, etc. At the national level, three bodies can be summoned at the DG Crisis Centre: an assessment, a management, and an information cell. Each one contributes to the overall decision process within their respective competences (described in section 3.1). The Directorate of Operations under the DG for Civil Security is responsible for national coordination in the event of an emergency. An emergency is to be coordinated at this level if:

- A minimum of two provinces are affected
- The means available to the provincial governor within his/her competence of coordination are exceeded.

In terms of operational organisation, DG Civil Security is responsible for deploying the civil protection services upon request and is also indirectly responsible for fire services. The civil protection services are comprised of 6 operational units, divided across the Belgian territory. The operational tasks of each unit are divided between 5 disciplines, which are described in section 3.1.

Mobilization of the emergency civil protection services at the provincial level occurs when:

- The scope of the emergency requires management by the government
- The immediate effects of the emergency exceed the municipality.

²⁸⁰ Christophe de Bassompierre, First Counsellor at the Permanent Mission of Belgium, "Belgium: Statement made at the Third UN World Conference on Disaster Risk Reduction (WCDRR)", Sendai, Japan, March 2015.

Mobilisation of the emergency civil protection services at the municipal level occurs when the scope of the emergency requires management at municipal level.

In international scenarios:

Belgian government has a unique mechanism called B-FAST (Belgian First Aid and Support Team) which provides emergency response capacities to other countries whose own resources are insufficient to face a disaster. These capacities include humanitarian goods, dispatching of experts in assessment or for coordination, or sending of teams (modules).²⁸¹

1.2.6 Policy for Relief and Recovery

The Belgian policy approach to relief and recovery is based around the Calamity Funds system (“Rampenfond” in Flemish; or “Fonds des Calamités” in French), which is aimed at assisting civilians when recovering from a natural disaster. The main actors and tasks are:

- the **local administration** is involved for collecting detailed information in the damage.
- the **provincial level** bundles the local information to a report, which is submitted to the Calamities Directorate of the FPS Interior;
- the **Minister of Interior Affairs** declares the damage to be falling under the fund, the report is discussed at the Federal Minister council. If approved by the council, the Calamities Directorate transfers the responsibility for covering the damages caused to civilians to the ‘National Calamities Fund’. The Ministry of Interior affairs communicates with the civilians.

²⁸¹ Ibid.



Figure 42: Flowchart on the procedure for recognizing payments under the calamity funds²⁸²

For more on the calamity funds, see section 1.3.2.

Regarding international relief and recovery efforts,

*The actions related to emergency relief are as much as possible multilaterally framed both at European (EU Civil Protection Mechanism) and global levels (United Nations OCHA Emergency Services Branch: UNDAC and INSARAG). Among the foreign disasters which have left their mark on the past decade, B-FAST was prominently present and active in the aftermath of typhoon Haiyan (Philippines, November 2013), Port-au-Prince earthquake (Haiti, January 2010), Aceh tsunami (Indonesia and Thailand, December 2004 – January 2005), and Al Hoceima earthquake (Morocco, February 2004).*²⁸³

1.3 Financing

1.3.1 Investing in preparedness and prevention

The DG Civil Security invests in preparedness for and prevention against fire and explosions, nuclear-, chemical- and biological incidents via three funds:

- Seveso Fund
- Nuclear Fund

²⁸² Adapted from the Ministry of the Interior Directorate of Calamities, “Calamités naturelles – Fonds des Calamités”, accessed 20 December 2015, <http://www.ibz.be/code/fr/loc/calamites.shtml>.

²⁸³ Bassompierre, “Statement WCDRR”.

- The fund/council for protection against fire and explosions

The Seveso Fund. The Seveso fund is financed by the companies falling under Seveso legislation. The revenues collected are gathered in two funds: One 'Fund for the risks of major accidents' and one 'For the prevention of major accidents'. The first falls under the Ministry of Home Affairs, the second falls under the Ministry of employment. The funds support related prevention like for example, the realization of information campaigns, the purchase and the maintenance of specific material of intervention, the management of the network of sirens, the provision of a databank of a dangerous goods to the fire protection organizations are financed thanks to the funds.

The Nuclear Fund. The development of Belgian CEP Nuclear plans are supported by the funding foreseen by the Belgian Nuclear sector itself. The sector contributes to the Belgian Nuclear funds. This fund supports the coordination of protection measures in case of emergencies.

The Fund/Council for Protection Against Fire and Explosions. Belgian's Federal level is responsible for the basic norms of fire protection and fire prevention. This council sets up these regulations, which can be complemented with local legislation or legislation of the regional level. The council for protection against fire and explosions has an advising and guiding role. The fund also supports professional training, funds research and is taking care of information sharing.

The department additionally supports local policy makers and police departments in developing crisis management measures, supports the process of settlements if civilians were to incur damage as a result of police actions and also evaluates the compliance of private security organisations with regulation.

Overall budget expenditures on relevant crisis management activities is shown in Table 11.

Table 11: Budget Expenditures of Mol on crisis management, 2011-2012 (in ,000€)²⁸⁴

Departments and Programmes	2011	2012
Strategic Coordination	2.164	3.853
Management	9.935	10.562
Logistics and Coordination	159.664	238.276
DG Crisis Centre	15.374	13.563
DG Civil Security	94.402	89.222
DG Security and Prevention	55.283	86.598
Provincial governments	19.404	20.613
Calltakers, 112 Emergency Centre and ASTRID	72.620	87.562

²⁸⁴ Ministry of the Interior, "Tableau d'évolution du budget par division organique et par programme (en kEUR)," accessed <http://www.ibz.be/download/RA-JV-2012/Budget-original-2013-01-17.pdf>.

OCAM	1.597	1.547
Total Crisis Management Expenditures	430.443	551.796

1.3.2 Investing in consequence management

Since 1 March 2007, the financing of recovery from most “ordinary” disaster risks, i.e. floods, earthquakes, overflows or backups at public sewers and landslides/subsidence, is organised via insurance companies, specifically fire insurance. This covers damages to houses and their contents by the aforementioned disaster risks.

When the civilian’s fire insurance does not cover the damage incurred²⁸⁵, and the Minister declares the damage to be originating from an unforeseeable natural disaster, the Calamity Funds system can be activated. According the Calamity Funds User Manual, the funds provide only for:

- Assets that do not constitute ordinary risks
- Agricultural goods in principle excluded from insurance coverage, i.e. no-harvested crops, livestock alive outside buildings, soil, crops, etc.
- Cars that are not safely parked in a garage or under a carport
- Goods that are not insured because of poverty of the household involved
- Property in the public domain of legal entities.

The ‘Calamity Funds’ also cover the costs of removal of explosives of World War II and damage to Belgian private property incurred in Congo, from the moment on the country Congo declared itself independent. Both represent a minor part of their tasks.²⁸⁶

When the “Calamity Fund” is activated, the damages are paid ad-hoc by the National Treasuries.²⁸⁷ Costs of the civil protection are paid from their assigned budget, and are seldom reclaimed from the civilians relying on the services.

In the year 2012, the most recent data retrieved, the Federal government decided on the acceptance of incurred costs as a result of unforeseeable natural disasters of 2012, € 25.144.592, of which €

²⁸⁵ Damage already insured by the voluntarily fire insurance is never covered by the fund. If the damage was not insured due to poverty of the household involved, a contribution might be paid by the fund. All other goods, not insurable, are covered by the fund (with restrictions on budgets and involving own contributions).

²⁸⁶ Belgium Ministry of the Interior, Calamities Directorate, “Guide - Calamities: Mode d’emploi, janvier 2015,” September 2014, http://www.ibz.be/download/natuurramp/vademecum_09-2014_Fr.pdf.

²⁸⁷ The mayor is responsible for collecting as much as possible information on the magnitude of the damage (all households make pictures of the damage and estimate the costs). The mayors give the gathered information to the governor of the Province, which asks the Federal Minister of Interior Affairs to declare the “Rampenfond” to be applicable.

24.642.671. A total of 20 events were recognized by the Council of Ministers under the required criteria.²⁸⁸

As of 1 January 2015, this fund has been regionalised, meaning that for all damages from events occurring since 1 July 2014, the regional department is responsible (previously FPS Interior):

- Walloon Public Services – “Service régional des Calamités”
- Flemish Government Administrative Affairs “Vlaams Rampenfonds”
- Regional Public Services of Brussels – “Direction des Investissements”²⁸⁹

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

See sections 1.4.2 – 1.4.5.

1.4.2 Departmental Lessons Learned systems

While it could not be verified for each single organisation (see chapter 3.1), in general, knowledge gained from past experiences is built at the KCCE.

1.4.3 Centralised (national) Lessons Learned system

While a specific mandate with regards to a centralised lessons learned system could not be verified, the KCCE is tasked with collecting information on civil security activities with the objective to improve the quality of services provided and to maintain the latest standards in service provision. The findings of these activities then provide inputs to the development of SOPs, a key responsibility of the KCCE. See also chapter 1.2.2 and 4.1.

1.4.4 International exchange for Lessons Learned

Belgium participates in international trainings and exercises, however no specific information on international exchanges for lessons learned could be identified in the frame of the study. Knowledge is built at the Federal Knowledge Centre Civil Security and the Higher Institute of Emergency Planning.

²⁸⁸ Belgium Ministry of the Interior, “Rapport d’activités 2012,” accessed 20 December 2015, http://www.ibz.be/download/RA-JV-2012/jaarverslag%202012%20FR_intranet.pdf.

²⁸⁹ “Fonds des Calamités,” Ministry of the Interior.

1.4.5 Regular policy reviews

Belgium conducts reviews for its civil protection policy and system, it could not be verified if these reviews take place regularly or if they occur ad-hoc. The latest review was conducted as part of the preparation of the New Framework Law of 15 May 2007 (i.e. Law on Civil Protection) (discussed in Chapter 2).

1.5 Resilience

Belgium's approach to the concept of resilience is based on increasing disaster awareness through education, trainings and awareness campaigns. For example, an awareness campaign was launched to inform citizens of the procedures applied when one finds him/herself in a Seveso crisis situation. The brochures were distributed to 400.000 Belgians civilians living in Seveso risk areas and via municipalities. The budget for the campaign was 1 million EUR.

In 2012, the Seveso campaign was complemented with an online campaign targeted at young Belgians. The website was shaped as a game: Seveso The Game: Be The Ultimate Survivor. In the game the young people experience the Seveso risks and procedures in a less formal way.²⁹⁰



Figure 43: Example of a recent campaign targeted at young Belgians. Financed by the Seveso fund²⁹¹

The trainings organised by the federal and provincial training institutes are discussed in section 5.3.

²⁹⁰ "Seveso: Campaign 2012," Belgium Ministry of the Interior, DG Crisis Centre, accessed 20 December 2015, <http://www.seveso.be/content/campaign-2012>.

²⁹¹ "Seveso The Game: Be the Ultimate Survivor," Belgium Ministry of the Interior, DG Civil Security.

1.6 Information sharing and data protection

The Royal Decree of 2 June 2015 creating the Strategic Intelligence Committee and the Coordination Committee outlines the responsibilities of these two bodies in the area of intelligence and security services, including the exchange of information between the two fields. Specifically, the Strategy Committee is responsible for reviewing each proposal in the context of the intelligence and security policy determined by the National Security Council and the proposed resolutions to be submitted to the National Security Council by the Coordination Committee. The Coordination Committee is responsible for submitting to the National Security Council proposals for the general policy of the intelligence and security services, including policy on the protection of sensitive information.

In addition, several European Directives and Regulations apply to Belgium, as all other Member States.

- Directive 95/46/EC is the legislation on the protection of personal data in Europe and it requires that one independent supervisory authority be established in each Member State to monitor its implementation.
- Directive 2002/58/EC on privacy and electronic communications, covering confidentiality, billing and traffic data, rules on spam and so forth, and establishing the EDPS as an independent supervisory authority with responsibility to monitor the processing of personal data by EC institutions and bodies.²⁹²

²⁹² European Data Protection Supervisor, “Legislation”, accessed 11 January 2016, <https://secure.edps.europa.eu/EDPSWEB/edps/EDPS/Dataprotection/Legislation>,

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The Belgian crisis management concept has its roots in the inter-World War era, to the “Liga voor Passieve Luchtbescherming van de Bevolking en de Burgerlijke instellingen”, founded in 1934. At that time, Liga was made up of volunteers, whose main activities were to warn the civilians in case of air strikes, to provide first aid care and to clean rubble following air strikes. Over time, the name changed to the ‘Belgian Civil Protection’, housed within the Ministry of the Interior. In 1963 the concept was defined as

*The civil protection encompasses all civil measures and tools needed in order to guarantee the preservation of Belgian population, guarding the country’s patrimonial in times of armed conflicts. The civil service also has to goal to intervene in crisis situations, catastrophes and damages of all kind and should then at all times aid civilians and protect goods.*²⁹³

The concept of Civil protection has continued to evolve overtime, no longer focused on warning against air strikes but rather organising to support fire fighters and civilian in case of larger crisis situations where expertise, technical aid and specific equipment is needed.

2.2 General crisis (emergency, disaster) management law

Key provisions of the legal framework for crisis (emergency, disaster) management in Belgium are identified below.

Legal framework for Civil Security (the fire departments and the Civil Protection services)

The Law of 15 May 2007 on the Civil Security determines the principles governing the organisation and functioning of the fire departments and the Civil Protection. According the DG Civil Security website, the basic principles underlying the execution of the reform of the civil security structure are the following:

- *a uniform method of working, by means of which all fire brigades (emergency rescue zones) intervene in the same efficient and safe manner during interventions,*
- *a thorough cooperation and more efficient division of tasks between emergency rescue zones, and between zones and units of the Civil Protection,*
- *innovation, with the examination of the best means, trainings, procedures and regulations, and with the exchange of best practices,*

²⁹³ Law of 31 December 1963 on Civil Protection, available (in French) <http://www.securitecivile.be/fr/regulation/loi-du-31-decembre-1963-sur-la-protection-civile>.

- *a uniformization and revaluation of the administrative and pecuniary statute of the professional and voluntary firemen,*
- *increase in scale, with a more efficient spending of the budget as a consequence.*²⁹⁴

Art 11. Of the second chapter defines clearly the tasks and organisation of the Belgian civil protection services' operations. First, their tasks are officially:

- To rescue and assist civilians in case of treat and also to protect their belongings
- To provide emergency medical assistance according to Art. 1 of the law of 8 July 1964
- The fight fire and explosions and their consequences
- To fight pollution and dangerous goods; including radioactive and ionised goods
- To provide logistical support,

Secondly, they have the task to:

- Preparedness: Proactively analyse and map the risks
- Prevention: All measures to prevent an minimise occurrence of risks and to minimise the likely effects
- Preparation: All measures to prepare the services on the likely threads
- Execution: To take the measures in case of emergency
- Evaluation: All measures to improve the preparedness, prevention, preparation and execution after incidents have took place.

Art. 153 defines that, for the civil emergency tasks mentioned in Art. 11, the Belgian Civil service is the only competent institute. Following Art. 48 of the law of 12 January 1989, mayors and governors can call on the Civil service' services when needed. Art. 154 defines the Minister of Interior affairs to be in charge of the Civil service. Art. 155 defines that the teams can consist of professional and voluntary staff.

The Civil Security Law additionally reforms the organisation of roles and responsibilities between the emergency services (see chapter 2.4) and the arrangements pertaining to local and provincial authorities (see chapter 2.5). The new organisation is operationalised on the 1 January 2015.²⁹⁵

Legal framework for managing crises at the national level

The Royal Decree (RD) of 31 January 2003 shapes the legal framework for crisis management at the national level (i.e. the federal phase of emergency planning). The European Commission *Civil Protection Vademecum* states,

This piece of legislation enables activation of immediate coordination at the national level. The RD confirms the role of the CGCCR in events that demand coordination at the federal level.

²⁹⁴ "Reform," DG Civil Security.

²⁹⁵ Law of 15 May 2007 on Civil Security <http://www.securitecivile.be/fr/regulation/loi-du-15-mai-2007-relative-la-securite-civile>.

Thus, it meets the overall goal of protecting the population against all types of risk that might affect it, and the lack of a general emergency plan on a national level.²⁹⁶

Legal arrangements concerning emergency planning and response

A **Circular of 11 July 1990** states that the obligation of all public administrators, municipalities, provinces, hospitals and enterprises is to develop individual emergency plans in relation to their own particular risk possibilities. The **Royal Decree of 16 February 2006** on emergency planning and response updates the 1990 Decree, assigning to Civil Protection the role of supporting the plans and executing/coordinating the operational tasks. This RD effectively established the current, three-levelled approach to crisis management planning and response in Belgium, which is undertaken at the municipal, provincial and federal/national levels (see section 1.2).

2.3 Emergency rule

Legal provisions concerning emergency rule in the event of disaster or emergency situation could not be identified.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Building on the Reforms to the civil security structure outlined in 2.2, a **draft Royal Decree of 14 October 2013** “modifying the RD of 25 April 2007 determining the missions of the emergency services that can be recovered and the missions that are free” sets out the division of tasks between the fire departments and the Civil Protection Services, taking into account their respective complementarities. The division of roles is discussed in section 3.1.²⁹⁷

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The current legal arrangements and regulations specific to regional and local authorities are set out in the following:

- RD of 28 March 2003 on municipal and provincial emergency planning
- RD of 16 February 2006 on emergency planning and response
- Law of 15 May 2007 on Civil Protection

The **Royal Decree of 28 March 2003** assigns emergency tasks to the municipal and provincial level and develops general and specific emergency plans, while the **Royal Decree of 16 February 2006**

²⁹⁶ “Disaster management structure,” European Commission DG ECHO.

²⁹⁷ “Reforms”, DG Civil Security.

updates the plans and terminology. This RD is followed by 4 explanatory circulars which further outline the procedures and roles for emergency planning.²⁹⁸

Art. 11 of the Law on Civil Protection defines explicitly the need of the Civil protection service to cooperate with the local emergency services (Fire fighters). To improve the cooperation, the federal level is obliged to sign cooperative agreements. The new organisation was officially operationalised on 1 January 2015. The major change of this law, however, is the integration of the municipal fire services into a structure of zones. The **Royal Decree of 2 February 2009** regarding the territorial delineation of the emergency rescue zones groups the former 250 local firefighters into 34 rescue zones. As of the 1 January 2016, the organization of the fire departments entirely passes from a municipal organization system to a zonal system.²⁹⁹

Figure 44 shows the new configuration of the 34 emergency rescue zones for the whole of Belgium.

²⁹⁸ NPU-1, explains more details; NPU-2 defines emergency plans for the provincial governor; NPU-3 defines the procedure for adopting provincial emergency plans and NPU-4 details the 5 operational disciplines for the emergency services.

²⁹⁹ "Reform." DG Civil Security.

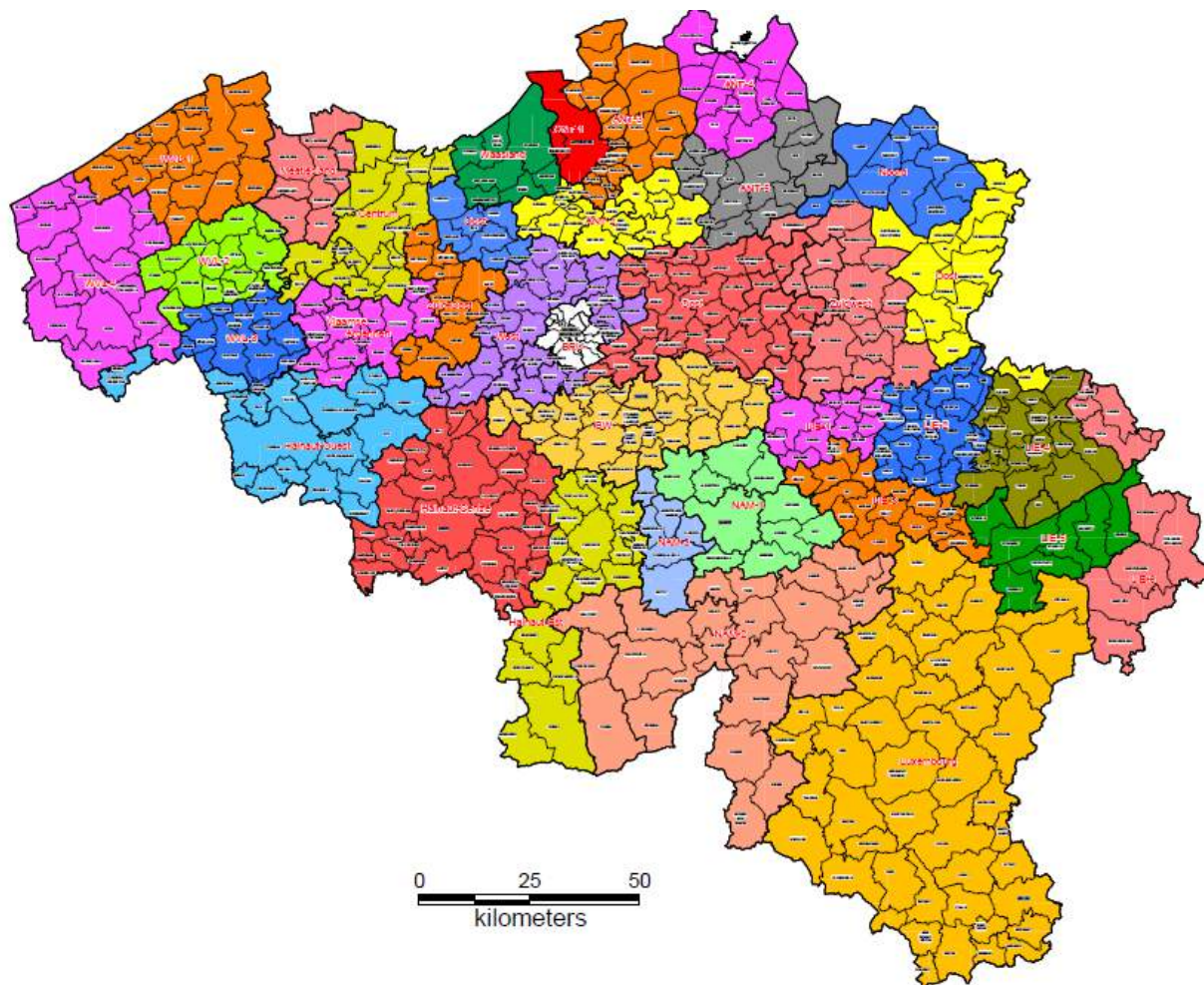


Figure 44: Map of new emergency rescue zones in Belgium³⁰⁰

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The legislation (RD 15 May 2007) allows volunteers in both the organizations of fire fighters and the operational civil protection services. Art. 67 defines the financing structure for all 34 zones, all with a mixed staff of professional fire fighters, voluntary fire fighters, professional ambulance non-fire fighter staff and/or voluntary ambulance non-fire fighter staff (Art. 103). Art. 155 of the same RD defines that the civil protection staff can exist out of professional members or volunteers.

Regarding their accountability, detailed rules are applied via Art. 159 till 166 of the former mentioned RD. The volunteer or professional is only accountable personally in case s/he committed a serious failure or failure on purpose. Also small failures can be incurred by the member of staff, if these occur more than average. Other damages are incurred by the organisation of civil protection. The services as well take up the costs of legal advice for staff members, or the relatives in case the staff member passes away, except when committed a failure on purpose or an serious failure.

³⁰⁰ "Maps of the 34 Emergency Rescue Zones," Belgium Ministry of the Interior, DG Civil Security, accessed http://www.civieleveiligheid.be/sites/5043.stg.fedimbo.be/files/explorer/34hulpverleningszones_34zonesdese_cours.pdf.

2.7 Legal regulations for international engagements of first responders and crisis managers

The **Royal Decree of 28 February 2003** established B-F.A.S.T (Belgian First Aid and Support Team), an emergency relief structure for the purpose of providing assistance to a country or countries affected by natural and man-made disasters. The Decree defines the underlying strategic framework of BFAST and its supporting structures, as well as the criteria for their use. These are described below:

Before a B-FAST operation can be deployed by the Belgian government, the following **intervention conditions** must be met:

- (i) The size of the disaster, natural or man-made, must exceed the capabilities of the country hit by the disaster to such extent that it poses a threat to the health or the lives of the population in the disaster zone.*
- (ii) The country hit by the disaster must launch a request for relief to the international community.³⁰¹*
- (iii) In case of an armed conflict in the disaster zone, an intervention by B-FAST is excluded.³⁰²*

Once deployed, a B-FAST operation must comply with the following **application criteria**:

- (i) B-FAST operations cannot exceed 10 days*
- (ii) B-FAST operations solely include immediate emergency relief.³⁰³*

Regarding the “**intervention radius**” of B-FAST operations, “[f]or practical and logistic reasons and according to the proportionality principle concerning the use of the available means, an intervention radius of maximum 6,000 km from Belgium is the limit for B-FAST operations abroad.”³⁰⁴ This criteria is not, however considered to be an absolute standard.

Finally, B-FAST operations abroad should be executed in coordination with the various international partners (UN, EU, NATO) and should be deployed on the basis of the **added value** of B-FAST. That is, the participation of B-FAST should be limited to the domains in which it can provide expertise based on Belgian capacities.

³⁰¹ These are usually coordinated at the European level, i.e. via the EU Civil Protection Mechanism. Once the EU CPM receives a request for assistance, it passes on the request to its Member State organisations, which then mobilized in coordination with the EU CPM.

³⁰² “History,” B-FAST, accessed <http://b-fast.be/en/content/history>.

³⁰³ Ibid.

³⁰⁴ Ibid.

3 Organisation

Figure 45 shows the Belgian disaster management structure, including government bodies, emergency services and warning dissemination structures.

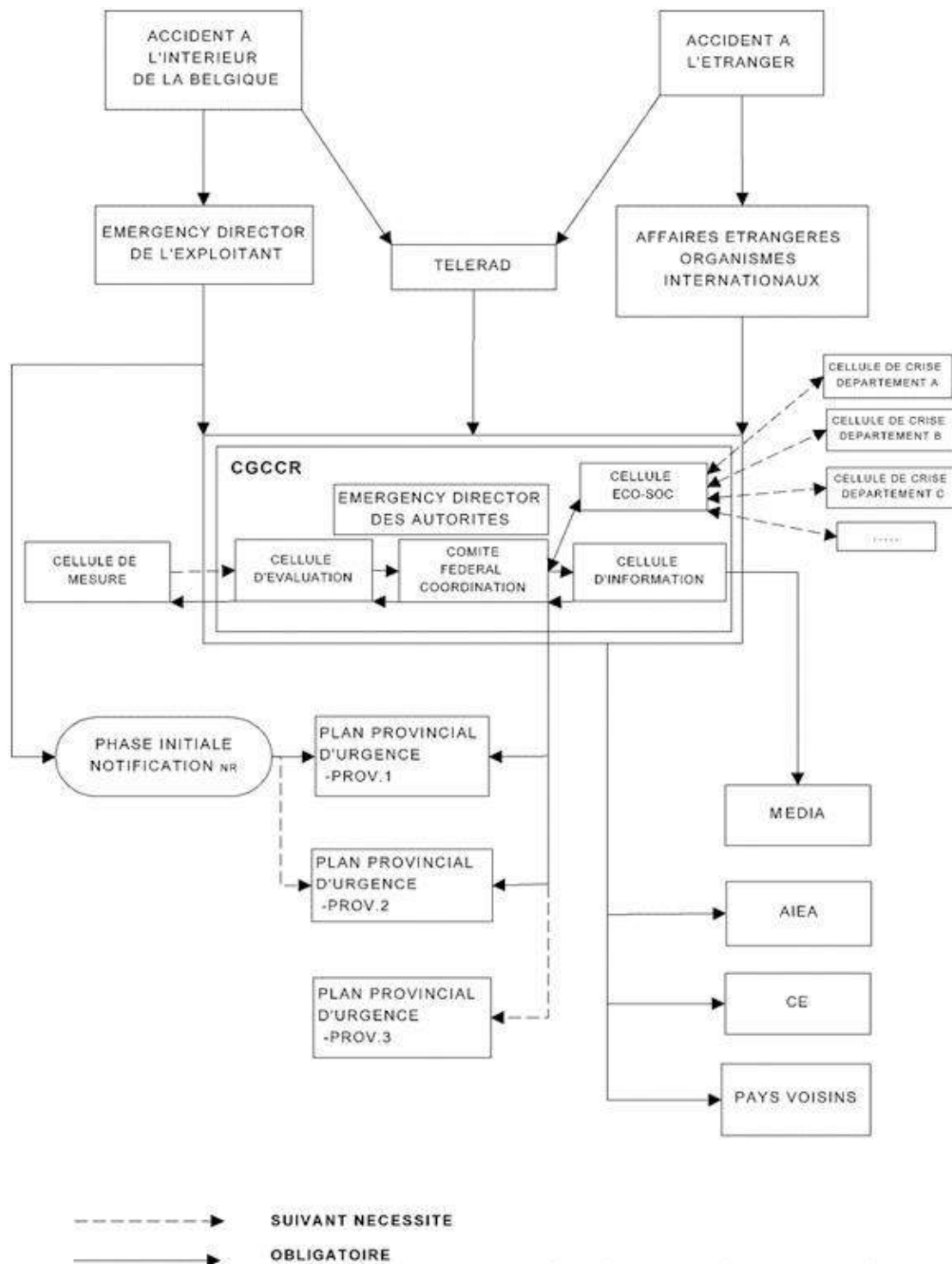


Figure 45: Belgium's Federal crisis coordination³⁰⁵

3.1 Organisational chart

The following organisations have a crucial role in the Belgian disaster and crisis management:

- Government ministries, in particular
 - Interior Affairs

³⁰⁵ "Disaster Management Structure," European Commission DG ECHO.

- Ministry of Public Health
- Foreign Affairs
- Defense
- Public security bodies
 - Police and rescue
 - Fire services
 - Civil protection services (part of the DG Civil Security)
- Coordination and Crisis Center of the Government (CGCCR)
- CNPD
- B-FAST
- Ministerial Council / Prime Minister
- Institute of Higher.. (IPSU)
- KCCE

The range of actors that may be involved in a disaster or crisis situation in Belgium are many and wide-ranging, and may include institutions not dedicated to crisis management services, e.g. DG Employment, Labour and Social Dialogue in the execution of a related Seveso Fund (see 1.3.1).

The institutes are largely based at the Federal level, rather than at the provincial or municipal level, and the overall responsibility for crisis management in Belgium rests with the federal government and the ministries.

In the event of a disaster or emergency, the Minister of Interior Affairs is the highest executive agent. The Minister is supported by several DGs, all under his or her control. Figure 46 shows the key DGs involved in crisis and emergency management.

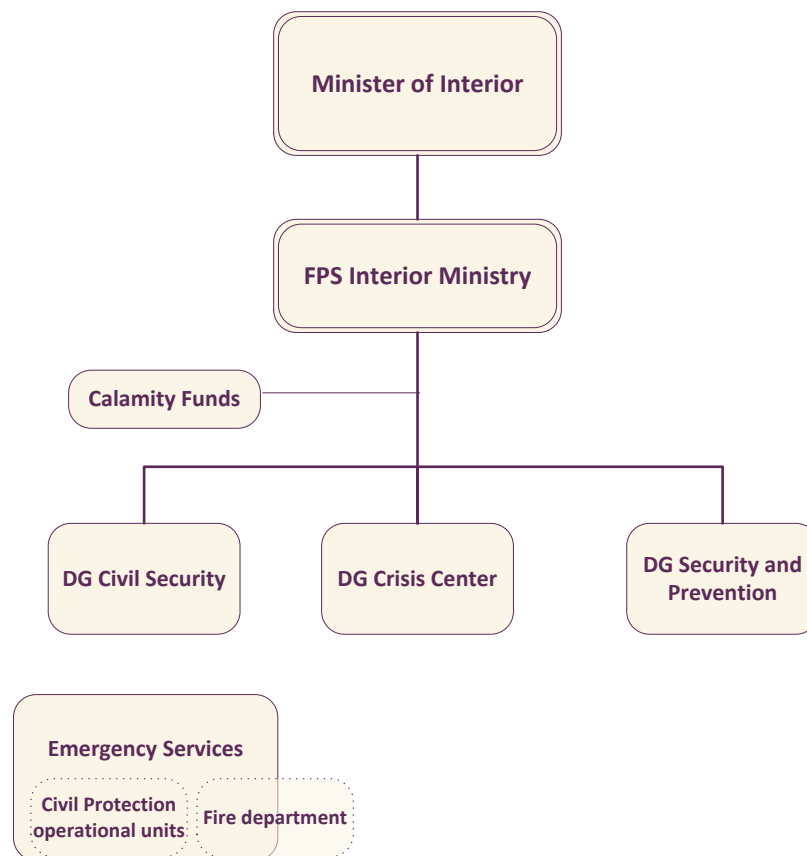


Figure 46: Main Belgian federal civil protection organizations³⁰⁶

DG Coordination and Crisis Centre of the Government (CGCCR), is responsible for overall coordination at the national level under the supervision of the Minister of Interior Affairs. It is through the CGCCR that the Minister manages national emergencies and engages the integrated police and rescue services. The DG for Civil Security is directly responsible for the civil protection services, which are federal services, comprised of six permanent operational units distributed across the Belgium territory. DG Civil Security is also indirectly responsible for fire services, which are operationally organised by emergency zones (34 in total). In a national level crisis, the CGCCR is responsible for coordination, while the Operations Directorate under DG Civil Security is responsible for managing the intervention. In the event of an international crisis, B-FAST is activated.³⁰⁷

In terms of preparedness and prevention, the CGCCR is tasked with initiating and organising proactive emergency planning, supported by the ISPU, while the responsibility for developing and implementing disaster preparedness plans in Belgium lies at all levels of government (i.e. municipal, provincial, national are responsible for emergency planning in their respective territories).

In the following sub-sections, the tasks and responsibilities of the Ministry of Interior Affairs (via DG Civil Security, DG Safety and Prevention, DG Crisis Centre), civil protection services of DG Civil Security, the fire brigade, police and rescue teams will be described in detail.

³⁰⁶ Ecorys Nederland.

³⁰⁷ "Disaster management structure," Commission DG ECHO.

DG CGCCR

The CGCCR (also known as DG Crisis Centre) is responsible for steering crisis management at the national level under the supervision of the Minister of Interior Affairs. The Crisis Centre has the assignment to organise the pro-active emergency planning. The centre is supported in this task by the IPSU (described in section 1.2.2.).

The main tasks of the Crisis Centre include:

- Collects and analyses on a permanent base relevant information for policy making and for operational organisations
- The centre offers expertise for crisis management at the Federal level
- The centre acts as the contact point for international crises
- After office hours, the centre acts as steering organisation for several federal institutions
- The crisis centre also is involved in public order management. The planning coordination and follow up of large events are tasks of the centre.
- The centre is actively involved in the security of high ranked officials visiting the country (kings etc.)
- Emergency plans on federal level are assigned to the centre
- The centre has a state of the art infrastructure for meeting and coordinating in times of crisis³⁰⁸

In the event of a national crisis, three bodies can be summoned at the Crisis Centre, each one contributing to the decision process within their respective competences: (i) an assessment cell, (ii) a management, and (iii) an information cell.

*The **assessment cell** evaluates the situation. It comprises experts and scientists from different competent authorities or services. It is presided by the department, which is most involved in the crisis, which is designated by the management cell.*

*The **management cell** (alias the Federal Coordinating Committee) takes the necessary measures and is the policymaking organ. It comprises the competent (federal) ministers or their representatives, and it is presided, in principle, by the Minister of Home Affairs or his/her representative.*

*The **information cell** communicates regularly about the measures taken to inform the population about the latest state of affairs and decisions taken by the management cell. The information cell comprises those responsible for communication or spokespersons from the departments concerned.*³⁰⁹

DG Civil Security

DG Civil Security is the hub for the non-police emergency services in Belgium, covering the 6 federal civil protection intervention service units (directly) and the municipal (now zonally organized) fire

³⁰⁸ "Sur le Centre de Crise," Ministry of the Interior, DG Crisis Center, accessed 20 December 2015, <http://centredecrise.be/fr/content/sur-le-centre-de-crise>.

³⁰⁹ "Disaster Management Structure," Commission DG ECHO.

services (indirectly). It is responsible for operational coordination in the event of an emergency, directly managing and controlling the Civil Protection Intervention Services (discussed below). The DG is comprised of 4 operational directorates, 3 staff services and five supporting cells. The operational directorates are:

- **Directorate 112**, a separate service coordinating the communication between the civilians in need of assistance in crisis situations and the professionally organised emergency services (police, medical aid, civil security etc.);
- **Centre of Expertise for the Civil Security (KCCE)**, responsible for training fire services and operational civil protection intervention services (see section 1.2.2.);
- **Directorate of Operations**, responsible for managing the interventions;
- **Directorate Equipment and New Technologies**, which supports the procurement of materials and equipment for the fire service and the operational civil protection intervention services (discussed under 5.4)

The DG is additionally charged with legal issues, prevention and public relations. The following figure shows the structure of the DG Civil Security. The purple dots are the main units within the department.

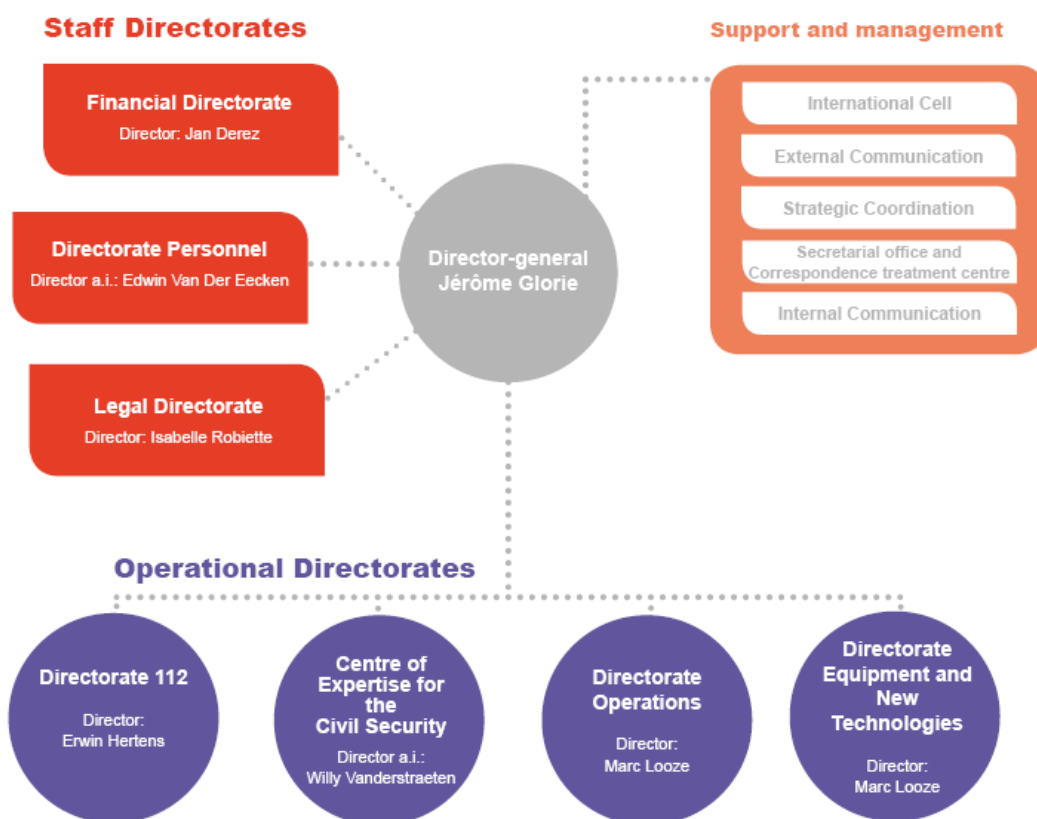


Figure 47: DG Civil security of the Federal Public Service of the Interior Affairs³¹⁰

³¹⁰ "Organisation Chart," Belgium Ministry of the Interior, DG Civil Security, accessed 20 December 2015, <http://www.securitecivile.be/en/content/organization-chart>.

Each emergency is handled by **civil protection intervention services**, which are managed and controlled by the DG Civil Security, providing the population with assistance in the event of both small or big disasters. Figure 48 shows the organizational structure in which the civil protection services operate.

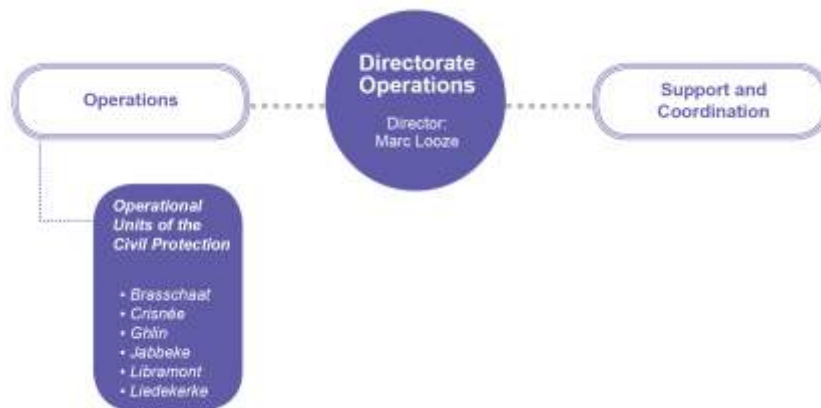


Figure 48: Organisation of the Directorate of Operations under DG Civil Security ³¹¹

There are six operational units, distributed across the Belgian territory:

- Brasschaat (near Antwerp)
- Crisnée (near Liège)
- Ghlin (near Mons)
- Jabbeke (near Brugge)
- Libramont (province of Luxembourg)
- Liedekerke (near Brussels).



Figure 49: Map of operational civil protection services units ³¹²

³¹¹ "Organisation Chart," DG Civil Security.

The operational tasks of the civil protection services are divided into five disciplines, each of which must draw up an intervention plan that outlines operating procedures.

Table 12: Five disciplines operational crisis management³¹³

³¹² “What does Civil Protection Do?”, Ministry of the Interior, DG Civil Security, accessed 20 December 2015, <http://www.securitecivile.be/en/content/what-does-civil-protection-do>.

³¹³ “Disaster Management Structure,” DG ECHO.

Discipline 1: Assistance operations
<ul style="list-style-type: none"> Controlling the emergency and eliminating associated risks, tracking persons, setting them free, rescuing and placing them in safety, protecting their goods. Claiming goods and persons.
Discipline 2: Medical, sanitary and psychosocial assistance
<ul style="list-style-type: none"> Starting the medical chain Applying medical and psychosocial care to victims and persons involved in the emergency Organising transport of victims Taking measures to protect public health.
Discipline 3: Police local to the area of the emergency situation
<ul style="list-style-type: none"> Restoring and maintaining public order Clearing entry and evacuation roads (if need be, escorting intervening services and means to the area of occurrence) Setting up the perimeter, physical demarcation, signalling and guarding, ensuring entry control to the operational theatre Executing public evacuation and supervising shelter Identifying victims Supporting judicial inquiry.
Discipline 4: Logistical support
<ul style="list-style-type: none"> Ensuring reinforcements of personnel and materials, as well as specialised rescue and assistance means Organising technical means for communication between disciplines, the operational command post and the coordinating committee(s) Organising foodstuffs and drinking water for the intervening services and stricken population.
Discipline 5: Information
<ul style="list-style-type: none"> Providing information and guidelines to the population (e.g. through the media) Providing information about measures for returning to normal conditions.

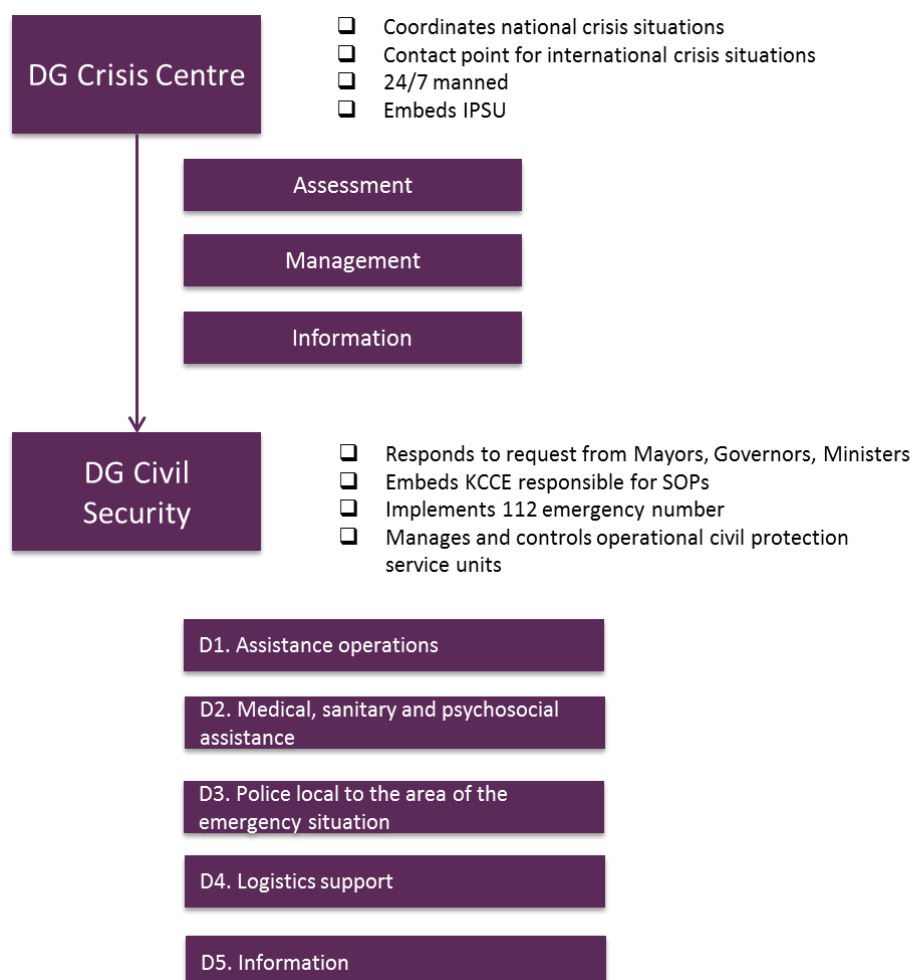
A few examples of the interventions of the Civil Protection are:

- Reinforcement of the water and foam supply, or heavy, specialized equipment in case of fire
- Shore up, apply canvasses, track and rescue victims of disasters or major accidents

- Deployment of specialized teams such as diving teams or dog teams during interventions or judicial missions of long duration
- Cleaning and transport of large-scale pollution such as petrol, asphalt, ...
- Decontamination and reception of the population in case of chemical or nuclear pollution
- Sealing of dikes and pumping in case of large-scale floods
- Distribution of potable water
- Support with means of telecommunication³¹⁴

National coordination

The CGCCR (DG Crisis Centre) is the hub in crisis management, and steers the cooperation with the operational civil protection forces under DG Civil Security. This DG intervenes at the request of the minister of Internal Affairs, the governors, the mayors, the fire departments or the police and provides reinforcement to emergency services with heavy and specialized equipment. The DG additionally coordinates with the Belgian fire fighters (operationally organised via emergency zones. The national approach for managing crises at national level, and the organisational cooperation between the relevant bodies, is sketched below.



³¹⁴ DG Civil Security, “What does Civil Protection Do?” accessed 20 December 2015, <http://www.securitecivile.be/en/content/what-does-civil-protection-do>.

Figure 50: Federal crisis management bodies³¹⁵

Fire services

The **Royal Decree of 2 February 2009** sets out a new system for organizing fire services in the Belgium. With the Decree, the 250 fire services were replaced by 34 zones. The website of the DG Civil Security states that, as of 1 January 2015, “The organization of the fire departments entirely passes [...] from a municipal organization to a zonal system. The royal decree regarding the emergency rescue zones divides Belgium into 34 emergency rescue zones.”³¹⁶ A map of the new zonal structure is shown in section 2.5.

Regarding the division of tasks and missions of the emergency services:

*A draft of royal decree modifies the division of tasks between the fire departments and the Civil Protection. It optimally takes into account the complementarity of these two emergency services. The fire departments take care of the basic missions regarding civil security, while the Civil Protection takes charge of the lengthy and specialized interventions. The possibility is given to the emergency rescue zones, by means of a cooperation agreement, to also appeal to another emergency rescue zone or to the operational units of the Civil Protection for certain basic missions when other means than the minimal means mentioned in attachment 1 of the royal decree regarding the determination of the minimal conditions of the fastest adequate assistance and the adequate means, are needed.*³¹⁷

Fire services are mobilized based on the principle of fastest adequate assistance:

This principle means that the fire department that can get to the place of a loss fastest will intervene. Before, it was the territorially competent fire department that intervened, regardless of whether another fire department actually could get to the place of the incident faster. The principle of the fastest adequate assistance is applied in practice since 2007.

*In 2012 a royal decree regarding the determination of the minimal conditions of the fastest adequate help and the adequate means, was passed. The prezones and the emergency rescue zones now have time until 31 December 2017 to take the necessary measures to meet the conditions provided in this decree.*³¹⁸

³¹⁵ Based on DG Civil Security.

³¹⁶ “Reform,” DG Civil Security.

³¹⁷ Ibid.

³¹⁸ Ibid.

Specialised teams

In addition to the roles that have been described relating to the various actors so far, the civil protection and fire departments have organized a number of specialized Civil Protection teams. These teams consist of personnel of the fire departments and the Civil Protection:

- Assistance teams with dogs
- B-FAST (discussed below)
- Dangerous goods safety advisors
- Divers of the civil protection
- High capacity pumping
- IBIS, specialized in tracking diseased persons, mainly in cooperation with the Disaster Victim Identification team (DVI) of the federal police
- Rescue with ropes
- Speleo
- USAR.³¹⁹

Civil military-cooperation

In the event of a national emergency, the following arrangement applies in accordance with the Ministerial Circular NPU-1: “Whenever civilian means are exhausted, military support can be considered and requested through the competent authority. In case of a municipal phase, agreement by the governor is compulsory.”³²⁰

Regarding international assistance, “the Ministry of Defense is part of the B-FAST structure, and it will provide available means and expertise to such missions, in accordance with international practices, e.g. the Oslo Guidelines”.³²¹

International assistance

The interdepartmental B-FAST is the framework for Belgian international assistance, comprised of civil protection services from Federal Public Service (FPS) Interior Ministry as well as FPS Public Health, Ministry of Defence and FPS Foreign Affairs. It was created by the Royal Decree of 28 February 2003 as a permanent emergency relief structure that could be mobilized at any time to assist a country or countries affected by a man-made or natural disaster. B-FAST consists of three committees and a permanent secretariat:

*The **B-FAST Secretariat** is the competent body for coordinating, preparing decisions, possible execution of and follow-up on all measures in the framework of emergency assistance.*

*The **coordination council** is presided by the Minister of Foreign Affairs or his/her representative. It consists of the representatives of the ministers involved and the director of*

³¹⁹ “Specialised Civil Protection Teams,” Belgium Ministry of the Interior, DG Civil Security, accessed 20 December 2015, <http://www.securitecivile.be/en/content/specialized-civil-protection-teams>.

³²⁰ “Emergency Planning,” Commission DG ECHO.

³²¹ Ibid.

the B-FAST Secretariat. In case of a request for assistance, the coordination council president submits a proposal for possible assistance to the Council of Ministers.

*The **planning committee** ensures strategic support and prepares files for treatment in the coordination council. It consists of administration representatives from the above-mentioned departments and focuses on technical- strategic aspects, e.g. investments, training, exercises and operations.*

*An **advisory committee** can be consulted consisting of representatives from NGOs and experts, designated by the coordination council³²².*

The decision process regarding the deployment of B-FAST services is discussed in the next section. Regarding operational activities of B-FAST, including the deployment of relief actions abroad, the organisation of exercises and trainings,

B-FAST has at its disposal the Contingent for Relief Operations Abroad (DICA-DIR), which is comprised of about 150 professionals and volunteers of the public emergency services (Fire Brigade and Civil Protection) from the FPS of the Interior, “supplemented if necessary with staff from Defence (logistics, communication, commando) and with volunteers (paramedical staff and doctors) from the FPS Public Health.” The detachment also engages in the aforementioned organisation of trainings abroad.³²³

3.2 Organisational cooperation

As has been described already in chapter 1, in terms of internal organizational cooperation of among the relevant crisis management organisations, three levels of government are central depending on the magnitude and scope of the incident.

The strategic framework of B-FAST (see Chapter 2.7) states that B-FAST should participate in the international coordination mechanisms for dealing with disasters. To that end, operations should be deployed in coordination with the various international partners (ie. EU, UN, NATO).

Regarding the mobilisation of B-FAST forces for international assistance,

As soon as a request for assistance reaches B-FAST, the Secretariat summons the planning committee and, if necessary, the advisory committee, to be able to submit a proposal to the coordination council. In practice, however, both the planning committee and coordination council will be summoned at the same time. At the moment of the convocation, so as to gain time, all relevant departments will start operational preparations.

³²² Ibid.

³²³ “FPS Interior and B-FAST,” B-FAST, accessed 20 December 2015, <http://b-fast.be/en/content/fps-home-affairs>.

As for the acceptance of international assistance, there is no specific national plan.³²⁴

³²⁴ "Emergency Planning," Commission DG ECHO.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The Belgian KCCE is assigned to collect, analyse, develop and spread knowhow and expertise on civil security. The development of Standing Operating Procedures (SOP) is part of their tasks. The SOP's are designed in order to have a prewritten procedure in case of a certain crisis, however given that each incident is different SOPs are to be considered as a best practice against which commanders can deviate following a proper assessment of the individual incident.

On its website, the DG Civil Security outlines the different phases of development of SOPs:

1. Development

The existing Standard Operation Procedures are developed by fire experts who work for the Centre of Expertise for the Civil Security. These fire experts act as the pilot and draw up an action plan in this framework, they appoint a working group of minimum six experts in this theme and they develop certain SOPs in co-operation and consensus with this working group.

2. Test phase

After a temporary approval of a Standard Operation Procedure by the Validation Committee, it passes through a test phase. After all, the most important thing is that a SOP corresponds to the reality of the field, that is meets the most recent intervention techniques and that it is sufficiently flexible for the application of the SOP in both a rural and an urban environment in the entire country.

After the publication of a SOP on this website, it is tested by different emergency rescue zones in Belgium. Testing and assessing a SOP in a realistic situation by at least two emergency rescue zones is the strict minimum. They can transfer their remarks on the basis of their findings to the Centre of Expertise for the Civil Security after which the pilot of the project can adapt the SOP with the help of his working group.

3. Best practice

After a test phase in at least two emergency rescue zones, a Standard Operation Procedure can be "definitively" validated by the Validation Committee and then the SOP is considered to be a best practice. Emergency rescue zones can use it if they want to. Nonetheless, SOPs are not a regulation and therefore don't need to be applied obligatory.

When it proves, after acquiring new insights on the subject or evolutions in the domain, that the SOP can still be improved after the test phase, this can off course be done by contacting the Centre of Expertise for the Civil Security.

4. Training, practice and exercise

As soon as a Standard Operation Procedure has become a best practice, trainings and exercise cards can be linked to it to prepare the relief workers even better for certain interventions. If needed, the necessary specialized equipment can be bought as well, to be able to optimally execute certain interventions.

*In case of emergency, the Belgian Directorate-General Civil Security is responsible for executing the SOP. The Directorate is part of the Federal Public Service Home Affairs.*³²⁵

4.2 Operations planning

The approach to dealing with emergencies by the authorities are set out by the numerous emergency plans for handling incidents at the different governing levels. At the first level, there are the multidisciplinary emergency and intervention plans (PUI in French, NIP in Flemish). These are developed by local authorities and cover (i) the General Emergency and Intervention Plans (PGUI in French, ANIP in Flemish), which are supported by the specific emergency and intervention plans (PPUI in French, BNIP in Flemish). The latter pertain to specific risk types and magnitude, allowing case specific planning (e.g. for airplane crashes).

The second level covers the Mono-disciplinary Intervention Plans, which are linked to are linked to the specific intervention plans of the different emergency services, detailing their functions and duties during incidents. For instance, a medical intervention plan or a psychosocial intervention plan. The third level covers the internal emergency plans of private companies.³²⁶

Thus, a “phased approach” to emergency planning exists in that, depending on the nature of the incident, assistance is structured for the local, provincial and national levels. This is show in Figure 51.

³²⁵ “How comes a Standard Operation Procedure about?” DG Civil Security, <http://www.securitecivile.be/en/content/how-comes-standard-operation-procedure-about>.

³²⁶ “Emergency planning,” DG ECHO.

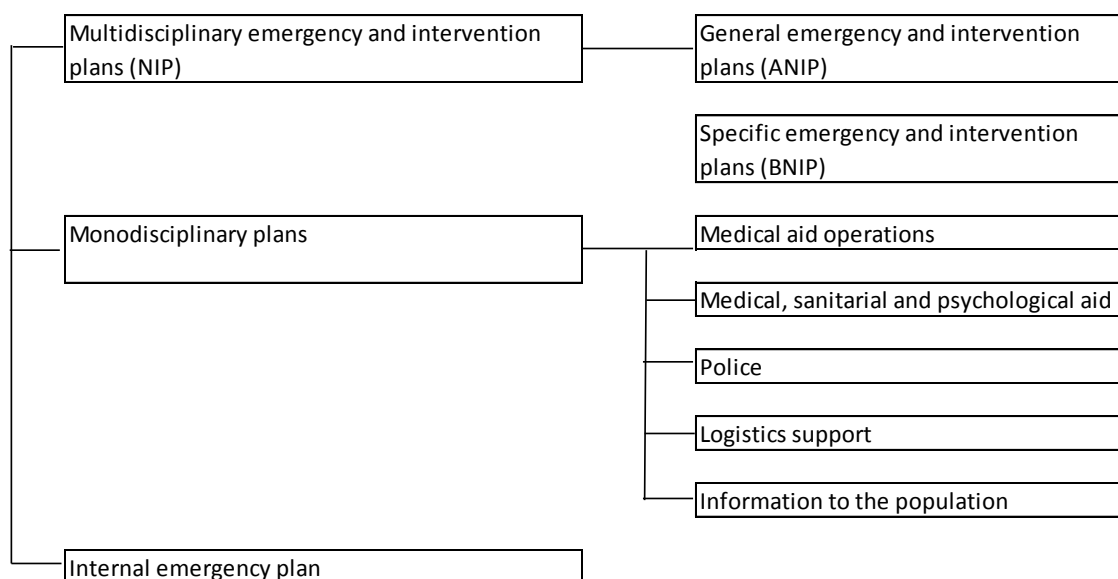


Figure 51: Crisis management plans³²⁷

4.3 Logistics support in crises

Within the DG for Civil Security, the Directorate Logistics is in charge of organizing logistics support. A full reference of logistical support intervention modules is available in the catalogue of intervention modules.³²⁸ Directorate Logistics (Dir-log) of the civil protection agency is in charge.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The coordination of the Civil Security is organised twofold. The first type of communication is organised for supporting the operational activities. The second coordinates and communicates externally.

4.4.1 Internal communication

There are several communication systems in place for supporting operational activities among Belgian authorities and/or crisis management actors. The Regetel network (Réseau gouvernemental de Télécommunications, or Governmental Telecommunications Network) is an independent network of the government, “with own servers, 410 telephone nodes, 90 fax nodes, own technical support

³²⁷ “Planification d'urgence et gestion de crise en Belgique,” Belgium Ministry of the Interior, DG Crisis Center, 21 January 2013, accessed 20 December 2015, https://5052.fedimbo.belgium.be/sites/5052.fedimbo.belgium.be/files/planification_durgence_et_gestion_de_crise_fr_def.pdf.

³²⁸ The full catalogue of intervention support modules is available at http://www.protectioncivile.be/sites/5043.fedimbo.belgium.be/files/explorer/catalogue_modules/Catalogus_interventiemodules_CB_03-2014_NL.pdf.

and an own network in the centre of Brussels. It ensures that all partners of the DG Crisis Centre of the FPS Interior are reachable in the event of a disaster. The network is split into a part dedicated to crisis situations (Crisis Network) and a second part dedicated to federal services (Federal Network).

The Crisis network allows contact between:

- Provincial crisis centres
- Permanent units of the Civil Protection intervention services
- 112/100 Emergency Centres (EC112/100)
- Communication and information centres (CIC-C101)
- Federal organisation responsible for the analysis of threats (OCAM, in FR or OCAD in NL)
- Crisis centers at Fluxys and Eandis, gas and electricity infrastructure providers
- Dispatch centres of the Belgian Red Cross
- Maritime Safety and Coordination centre (MRCC) in Ostend and the Maritime Information Node (MIC).

The Federal Network connects higher level government actors, e.g. federal ministers and their chiefs of staff; DGs of the FPS's; the Royal Palaces; and the Speakers of the House of Representatives and the Senate.³²⁹

In addition, Belgium is equipped with a TETRA communication network, operated by ASTRID. TETRA, or "TErrestrial TRunked RAdio", is a European-developed standard for digital voice and data communications (i.e. national radio communications, paging and dispatching network) designed for emergency and security services.³³⁰

4.4.2 External communication

DG Crisis Centre is responsible for informing the media and general public in the event of an emergency. The services are day and night available to give support in crisis situations with GIS tools, videoconferences, electric generators, sirens etc. The Crisis Centre manages the network of around 570 sirens to rapidly warn the population in the event of an incident near nuclear sites and factories with significant industrial risks (i.e. Seveso high threshold risks) and nuclear areas.³³¹

³²⁹ "Regetel," Belgium Ministry of the Interior, DG Crisis Centre, accessed 20 December 2015, <http://crisiscentrum.be/fr/content/regetel>.

³³⁰ "The TETRA Standard," ASTRID, accessed 20 December 2015, <http://www.astrid.be/templates/content.aspx?id=3866&LangType=1033>.

³³¹ "Alerte à la population," Belgium Ministry of the Interior, DG Crisis Center, accessed 20 December 2015, <https://5052.fedimbo.belgium.be/fr/content/alerte-la-population>.

The use of alternative means of early warning (e.g. SMS warnings) are currently being tested as part of the BE-Alert project. Civilians can register their mobile phone number to be alerted in case of emergency. Civilians need to register and can be informed via³³²:

- Spoken messages on fixed and mobile phones
- SMS alerts on mobile phones
- Text messages via email
- Text messages via fax.

Civilians may contact the government via the common European emergency number: 112. The line is operated by the 112 Directorate of the DG Civil Security of the FPS Interior and the Ministry of Public Health. – Minister of Home Affairs & Minister Public Health. A federal multi-linguistic project is planned in the near future.

Other emergency numbers include

- Police: 101
- Emergency Medical Services: 100
- Fire Brigade: 100
- Child focus: 116.³³³

³³² "Be-Alert: soyez alerté en situation d'urgence," Ministry of the Interior, DG Crisis Centre, <http://centredecrise.be/fr/content/be-alert-soyez-alerte-en-situation-durgence>.

³³³ "Emergency Planning," Commission, DG ECHO.

5 Capabilities

5.1 Human resources

The number of staff employed at the main crisis management organisations of the federal government amounts to around 3.024 persons. The Federal level also has on its payroll 373 persons working in the provinces. It is unclear, however, the proportion of the federal staff located in the provinces that are working in the area of crisis management. The staff statistics as per 1 September 2014 are shown in Table 13.

Table 13: Staff of most relevant crisis institutes (as per 1 September 2014)³³⁴

Institute	Number of staff
DG Civil Security	1366
- Central directorate in Brussels	131
- Knowledge Centre	12
- Operational units	571
- Call takers 112/100 and Operators 101	652
DG Security and Prevention	195
DG Crisis Centre	80
Direction des calamates	17
Fire fighters	18.000 (2/3th is volunteer)

Additional resources are available from other civil protection service providers, e.g. fire services (amounting to approximately 18.000 in 2014, of which around two-thirds are volunteers), emergency medical services and from NGOs such as the Belgian Red Cross.

Private sector stakeholders include:

- Belintra for chemical transport incidents
- SCK – The Belgian Nuclear Research Centre
- IRE – The National Institute for Radioelements
- Belgoproces for nuclear incidents.³³⁵

³³⁴ Isabelle Mazzara, "Plan de management de la président du comité de direction du SPF Intérieur 2014-2020," accessed <http://www.ibz.be/download/plandemanagement-2014.pdf>.

³³⁵ "Disaster management structure," Commission DG ECHO.

5.2 Materiel (non-financial) resources

The Civil Protection has access to heavy, specialized equipment that can be deployed for her own interventions, as well as for the reinforcement of the interventions of other emergency services. A few example of this equipment are:

- super cannon: to extinguish heavy fires in chemical companies.
- goliath pump: can pump away very large amounts of water with a speed of 66,000 litres per minute, for instance in case of floods.
- decontamination units: to decontaminate people that became contaminated during a nuclear or chemical accident.
- vacuum tank: to quickly drain off and transport dangerous substances after for instance oil pollution in a river or ditch.
- waterline: can create up to 600 water bags per hour.³³⁶

The protection agency can additionally rely on the equipment of the fire protection agencies, the specialized private protection services and the army. Fire fighters from the Industrial Chemical plants can be called for support in crisis situations. The new Turbo-Lösch fire truck of the Antwerp plant of the Chemical company BASF is even co-financed by the Belgian Civil protection agency. The Ministry of Interior Affairs pays BASF a fee of 110.000 EUR per year for the next 10 years. The highly powerful fire hoses can spray a distance of up to 100 to 150 meters and up to 70 m high and 45 m in width; it can spray up to 25.000 liters of water per min. The Turbo can be used for Belgian interventions, and regional cross border interventions. When in operation, the fire truck is supplied with water via equipment of the Belgian Civil protection forces.³³⁷



Figure 52: BASF's new fire truck, co-financed by the Ministry of Interior affairs³³⁸

³³⁶ "What does Civil Protection Do?", DG Civil Security.

³³⁷ Steamexfire, "De turbo-jet van BASF Antwerpen," *Een-een-twee*, <http://www.steamexfire.nl/image/109.112turbopdf.pdf>.

³³⁸ Ibid.

The civil protection organisation has a catalogue of 120 pages detailing their material resources, ranging from equipment to reinforce the fire departments and emergency rescue zones in case of big fires to equipment for logistics support to resources to support the police services.³³⁹

5.3 Training

Within the Civil Protection structure, advisory boards are installed. These advise the operational zones, units, operators and call takers. The structure knows three advisory boards: personnel, material and training.

Within the training advisory board, four units exist.

- The trainings for public fire fighters is organised and continuously reviewed at the '*Hoge Raad voor de opleiding voor de openbare brandweerdiensten*'. The council advises the Minister of Interior Affairs directly on the trainings, reglementation and reports on the quality of the trainings organised at the local/provincial training centres.
- The *programming commission* is active in the needs mapping for trainings, advising on the syllabi, making proposals to the Minister on courses and exams and controlling the redaction committee.
- The third unit '*Commission on Equalisation and exemption*' advises the Minister on the levelling of diploma standards, courses and brevets and the exemption of courses and exams.
- In 2003, a '*supra-provincial training council*' for the French speaking and German speaking public fire fighters and a '*supra-provincial training council*' for the Dutch speaking public fire man were founded. The councils are grouping the presidents of the regional federations, technical and operational representatives of the General Council. An official of the Brussels department of fire fighters is added. These councils coordinate and level provincial trainings.

340

The training locations are spread around the provinces.

- The Federal Training centre is located in Archennes.
- The training centre for the province of Antwerp is located in Emblem.
- The training centre for Brussels is located in Brussel centre.
- The training centre for the province of Henegouwen is located in Jurbise.
- The training centre for the province Limburg is located in Genk.
- The training centre for the province Liege is located in Seraign.
- The training centre for the province Luxemburg is located in Bastogne.
- The training centre for the province Namen is located in Namen.

³³⁹ The full catalogue of intervention support modules is available at http://www.protectioncivile.be/sites/5043.fedimbo.belgium.be/files/explorer/catalogue_modules/Catalogus_interventiemodules_CB_03-2014_NL.pdf

³⁴⁰ "About Civil Security," DG Civil Security.

- The training centre for the province East-Flanders is located in Gent.
- The training centre for the province West-Flanders is located in Bruges.
- The training centre for the province Flemish-Brabant is located in Asse.
- The training centre for the province Wallonian-Brabant is located in Wavre.³⁴¹

The training centres organise mono-disciplinary and multi-disciplinary trainings at location as well. A recent multidisciplinary training was organised in a new railway tunnel under Brussels Airport. The team tested the new SOP, under guidance of the Federal Expertise Centre.



Figure 53: Training in the new Diabolo tunnel under Brussels Airport³⁴²

Certification

The trainings are organised at the provincial level. The trainings consist out of a bachelor type of training structure, split also in modules which can be followed separately. As of 1 January 2016, trainings follow the regulation of the RD of 18 November 2015 “Concerning the training of members of public emergency services and amending various Royal Decrees.”³⁴³

The trainings consist of separate courses for :

- Adjudant
- Fire man
- Unit chef
- Korporal
- Officier
- Sergeant
- Technical expert fire prevention
- Trainings outside Belgium

³⁴¹ “Belgium – Prevention and Preparedness,” European Commission Civil Protection Vademecum, accessed http://ec.europa.eu/echo/files/civil_protection/vademecum/be/2-be-3.html.

³⁴² Activiteitenverslag Binnenlandse Zaken 2012 (2013)

³⁴³ Royal Decree of 18 November 2015 Concerning the training of members of public emergency services and amending various Royal Decrees, accessed <http://www.securitecivile.be/fr/regulation/arrete-royal-du-18-novembre-2015-relatif-la-formation-des-membres-des-services-publics-de>.

A separate training *crisis management* is organised at the provincial centres. This training is structured in 4 disciplines and totals to 50 hours of training.

- Regulation
- Severe accidents: risk analysis and risk management
- Emergency planning
- Telecommunication and procedures, information management in collective emergencies

Also short courses are added. For example on gas protecting suits and diving.

After a successful participation in the courses, the students receive a certificate useful to promote within the civil protection or fire fighters organisations.

Annex I to the RD of 18 November 2015 on training defines that staff, meeting the requirements to participate in the training, are supported by subsidies covering the registration costs. The total subsidies allotted per training are listed in this Annex.

³⁴⁴

Exercises

Belgium participates in the European Civil Protection Modules Exercises (EU Modex) to prepare for international operations in the framework of the EU CPM. In March 2015, Belgium took part in the European exercise EUBelmodex held in Antwerp. The scenario of the exercise stated: “impressive floods have had an enormous impact on Belgium, the Netherlands and the north of France, bringing about dangerous situations in the surroundings of certain companies in the Port of Antwerp and in a hospital. To be able to face this large-scale situation, the Belgian authorities have requested the European assistance as reinforcement.”³⁴⁵

Intervention teams and coordination experts from multiple countries participated to the event, including from During the exercise, intervention teams and coordination experts from multiple countries came into action: Belgium, Austria, Portugal, Germany, Italy, Latvia, Lithuania, Sweden, Bulgaria and Slovakia. In total, 300 individuals participated, spread across 5 sites in Antwerp. On the Belgian side, the following are said to have participated: DG for Civil Protection and DG Crisis Centre (FPS Home Affairs), the operational units of the Civil Protection, the Emergency Planning Service of the federal services of the governor of Antwerp, the Emergency Planning Service of the city of Antwerp, the emergency rescue zone Antwerp, the emergency rescue zone ‘Rand’, the municipality of Edegem, Defence, the Havenbedrijf Antwerpen, the FPS Public Health, the (local and federal) police, different communication specialists and the university of Antwerp.³⁴⁶

³⁴⁴ Royal Decree of 18 November 2015.

³⁴⁵ “The European Civil Protection Modules Exercises,” DG Civil Security, <http://www.civieleveiligheid.be/en/content/european-civil-protection-modules-exercises>.

³⁴⁶ Ibid.

5.4 Procurement

5.4.1 Procurement regulation

European regulations

The procurement of public contracts needs to be in line with the principles of European treaties and especially with the free movement of goods services, capital and people. Furthermore the procurement needs to comply with the principles of equality, proportionality etc. For some types of procurement additional regulations are codified in directives. Within the European legislation, three different procurement directives apply. These directives are mutually exclusive meaning only one of the directives applies to the public procurement. Directive 2014/25/EU (on procurement of utilities) and directive 2009/81/EC (on procurement in the defence and security industry) are topic specific. If these specific directives do not apply, public sector directive 2014/24/EU is applicable, which is the replacement of directive 2004/18/EC. The aim of the new directive is to simplify the rules on public procurement; improve the participation of SMEs and stimulate cross border joint procurement.

Stimulation of cross border joint procurement is helpful in case of a major internal crisis or a cross border crisis. The directive states in the preamble that contracting authorities should be able to choose to jointly provide their public services in cooperation with other authorities, without being obliged to use any legal form. These services don't have to be identical. The cooperation does not require all participating authorities to fulfil the obligations of the contract, as long as there is a commitment to contribute to the cooperative performance. The preamble points out that there are difficulties in cross border joint procurement. Therefore new rules have to be made. In these rules, the conditions for cross border procurement have to be clarified, as well as the applicable regulations. In addition, contracting authorities should be able to set up joint entities established under national or EU law. The new rules are specified in article 39 of the regulations.

If the procurement is executed by a centralised purchasing body located in another Member State (MS), the procurement shall be conducted in accordance with the national regulations of the MS where the purchasing body is located. In addition, several contracting authorities from different MS may jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system. Participating contracting authorities will then conclude an agreement that determines all responsibilities of the parties and the internal organisation of the procedure. As said before, the contracting authorities can set up a joint entity. The parties shall decide on the applicable rules on procurement. They can choose the rules of the MS where the entity has its registered office or where the entity carries out its activities.

This project evolves around the procurement related to crisis management, for example the procurement of ambulances, emergency packs or trainings. The utilities directive applies to gas and heat, electricity, water, transport services, ports and airports and postal services (article 8-13). The directive on defence and security applies to supply of military equipment and sensitive supplies. The majority of procurement in crisis management will be procured by normal NCCs and local authorities like the fire department or police and will not be secret. So in most cases the public sector directive

(2014/24/EU) is applicable. This chapter will therefore focus on this directive. Keep in mind that the other directives can also be applicable, for example if the army is used to solve a major crisis. The directive is addressed to Member States and has no direct effect on the national regulations. The directive needs to be implemented first.

5.4.1.1 Scope of the public sector directive

The public sector directive applies to procurement by contracting authorities with respect to public contracts as well as design contests whose value is estimated to be not less than (article 4):

- € 5.186.000 for public works contracts;
- € 134.000 for public supply and service contracts and design contests, awarded by central government;
- € 207.000 for public supply and service contracts or design contests awarded by sub-central contracting authorities.
- € 750.000 for public service contracts for social and other specific services listed in Annex XIV.

This directive should not apply to certain emergency services where they are performed by non-profit organisations or associations, since the particular nature of those organisations would be difficult to preserve if the service providers had to be chosen in accordance with the procedures of the directive. Furthermore the directive does not apply to public contracts with the purpose of providing public communication networks or electronic communication services; public contracts organised pursuant to international rules; several types of service contracts, e.g. rental, legal services and employment contracts and service contracts based on exclusive rights; and last, public contracts between entities within the public sector (articles 8-12).

5.4.1.2 Award procedures

On a European level, procurement is executed by the European Commission. The public sector directive contains several award procedures:

- open procedure,
- restricted procedure,
- competitive procedure with negotiation,
- competitive dialogue,
- negotiated procedure without prior publication.

The *open procedure* applies when no other procedure is chosen. In the open procedure, the contracting authority submits a call for tenders. Interested companies may submit a tender. The best offer is chosen, based on the selected award criteria (article 27).

The *restricted procedure* consist of two phases. In the first phase a call for expression of interests is set out. Interest candidates may submit an invitation to tender. The contracting authority will then

invite the most suitable candidates to submit a tender. The contracting authority will award the contract to the best tender, based on the selected award criteria (article 28).

In the *competitive procedure with negotiation* any interested candidate may submit a request to participate in the negotiations, in response to a call for competition. In this call for competition, the contracting authority has provided a description of their needs and the characteristics of the works or services to be procured. Only the interested candidates that are invited may submit an initial tender, which will be the basis of the negotiations (article 29). In several cases the negotiation procedure can be used without prior publication, for example when the public contract contains a creative achievement; when there is no competition; when intellectual property rights need to be protected, or when there are reasons for extreme urgency (article 32).

In the *competitive dialogue* any interested candidate can submit a request to participate in response to a contract notice given by the contracting authority. The contract notice provides the information on and the needs and requirements of the contracting authority, as well as the chosen award criteria. The selected interested candidates will join the competitive dialogue, in which the means best suited for satisfying the contract will be defined (article 30).

A new procedure within this directive is the *innovation partnership*. In this procedure, any economic operator may submit a request to participate in response to a contract notice, by providing information for qualitative selection that is requested by the contracting authority. The innovation partnership can be set up with one partner or several partners. Only the economic operators invited by the contracting authority participate in the procedure. After each phase, the contracting authority may decide after each phase to terminate the partnership or reduce the number of partners within the partnership, based on the targets.

According to article 26, the open procedure and restricted procedure are the standard procedures to apply in case of procurement. The other procedures can be used in a limited number of situations, for example when the service is innovative, or when the technical specifications can't be determined (art. 26, sub 4.).

Contracting authorities can use framework agreements, provided that they apply the procedures in this directive. The agreement cannot exceed four years. Contracts within the agreement will be awarded according to the rules in article 33.

In most procedures the candidates are chosen with the use of selection criteria. The selection criteria may relate to suitability to pursue the professional activity; economic and financial standing and technical and professional ability. All criteria need to be related and proportionate to the matter of the contract (article 58).

National regulations

Member States need to implement directive 2014/24/EU before 18 April 2016. In Belgium, procurement is codified in the Law on procurement and orders on works, services and supplies (In Flemish: De wet overheidsopdrachten en bepaalde opdrachten voor werken, leveringen en diensten).

5.4.1.3 Scope

The law on procurement applies to public contracts between a public contracting authority and one or more suppliers with respect to carrying out works, supplies or services on the market. The contracting authorities can be the Federal State, territorial agencies, and public institutions (article 2). The value of the contract is not a factor in the definition of the scope.

Some types of public contracts are excluded from the scope from the law. For example, when other rules apply according to international law, or if the procurement takes place between to public entities (article 17).

5.4.1.4 Procedures

In all types of procurement, the contracting authorities need to make sure that candidates are treated equally, without discrimination and that the procedures are transparent. The Belgium law has the same procedures as the European directive, with the open and restricted procedures as the standard and the procedure with negotiation and the competitive dialogue in a limited number of situations (article 26 and 27). One difference is that Belgium has a distinction between a tender procedure and the procurement. In a call for tenders, the candidates will be evaluated according to more criteria, while the procurement is only evaluated according to one criteria, in most cases the price.

5.4.1.5 Award criteria

The award criteria are stated in article 25 of the procurement law. According to the law, the criteria have to be line with the subject of the public contract and have to make sure that tenders can be compared objectively. The law provides some examples like price, quality, technical value and functional characteristics. These criteria are comparable to the criteria in the EU directive.

5.5 Niche capabilities

The B-FAST structure (described in chapter 2.7 and 3.1) enables Belgium to send a range of intervention services in the case of large-scale disaster abroad. What makes the B-FAST teams unique is the combination of experts from Public Health, Defense, fire departments and the Civil Protection emergency services. Specific intervention modules that can be deployed abroad in the framework of B-FAST are:

- Urban Search And Rescue (USAR), amongst which relief teams with dogs
- High Capacity Pumping (HCP)
- Advanced Medical Post
- Field Hospital
- CBRN Detection and Sampling
- Emergency Temporary Shelter
- Water Purification³⁴⁷

One of Belgium's particular niche capabilities pertains to flood disasters. As mentioned in the list above, BFAST can provide High Capacity Pumping in the event of extensive flood disasters.

The staff has received a specific training for that purpose, which will be completed by the generic functions and means required for the modules to be deployable fully autonomously in foreign countries (in particular concerning accommodation, food supply, etc.).

These flood disaster modules meet the European standards with regard to capacity (e.g. at least 1000 m³/hour), interoperability with other European intervention teams – e.g. where coupling devices are concerned – availability and autonomy.³⁴⁸

More information on all of the intervention module capabilities can be found on DG Civil Security website.

³⁴⁷ "B-FAST," DG Civil Security, <http://www.civieleveiligheid.be/en/specialized-team/b-fast>

³⁴⁸ "High capacity pumping," DG Civil Security, <http://www.civieleveiligheid.be/en/specialized-team/high-capacity-pumping>.

Resources

Legislative acts

Law of 31 December 1963 on Civil Protection. Accessed (in French) <http://www.securitecivile.be/fr/regulation/loi-du-31-decembre-1963-sur-la-protection-civile>.

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Law of 15 May 2007 on Civil Security. Accessed (in French) <http://www.securitecivile.be/fr/regulation/loi-du-15-mai-2007-relative-la-securite-civile>.

Other normative acts

Ministry of the Interior. Ministerial Circular C-2006/00885 NPU-1 Emergency Planning and Response. 26 October 2006. Accessed (in French) http://crisiscentrum.be/sites/5052.fedimbo.belgium.be/files/cm-mo_npu-1_26_10_2006_plans_durgence-noodplannen.pdf.

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Royal Decree of 19 December 2014 establishing the organization of fire prevention in emergency zones. Accessed (in French) <http://www.securitecivile.be/fr/regulation/arrete-royal-du-19-avril-2014-portant-la-determination-de-la-cle-de-repartition-de-la-dot>.

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Expert interviews

Several departments of the Ministry of Interior affairs, the Belgian Knowledge Centre on Civil Security and experts of the Civil Security organisation were contacted by phone and by e-mail. We did not manage to arrange a telephonic interview or review of our analysis.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

BULGARIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: CSDM (Todor Tagarev, Petya Ivanova, Nataly Ivanova)



MOI General Directorate
“Fire Safety and Civil Protection”



Civil Protection
of the Republic of Bulgaria

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The authors of this study are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The number of natural disasters in Bulgaria has been increasing in recent years. For just four months—from June to October 2014—heavy floods affected half of Bulgaria’s regions and took 18 casualties on five different occasions. By the end of October, the total number of disasters since the start of the year exceeded 600, including train crashes and explosions in ammunition factories, the most recent one killing 15 people.

The types of challenges faced come in sharp contrast with the traditional concerns and the approach to protection of the population prior to WWII and during the Cold war. After several waves of reorganisation of the former militarised system for *civil defence*, the civil protection units and their management bodies are now part of General Directorate “Fire Safety and Civil Protection” (FSCP) within the Ministry of the Interior (MOI).

The main legal act regulating their activities is the *Disaster Protection Act*. A separate concept does not exist currently. The Disaster Protection Act reflects currently prevailing conceptual views on crisis management and disaster response.³⁴⁹ A number of strategies and executive regulations complement the law in regard to disaster prevention, the functioning of volunteers and volunteer organisations, consultative bodies, mid-term programmes, annual implementation plans, etc. Crisis preparedness and response need to adhere to a number of other laws, e.g. on the Ministry of the Interior, on the environmental protection, on the waters, on the regulation of territories, etc.

The central executive power continues to play the key role, primarily via the MOI General Directorate “Fire Safety and Civil Protection.” The regional and municipal authorities have their own disaster protection plans, and each region has a local FSCP directorate. Along with other ministries and central executive agencies, critical infrastructure operators, other trade companies, volunteers, health services, and the armed forces, they perform their crisis management duties in a *Unified Rescue System*.

FSCP is a point of contact for international co-operation, including humanitarian aid, engagement for disaster response and relief, protection of European critical infrastructures, etc.

FSCP has about 8 500 personnel and is sustained through the budget of the Ministry of the Interior. Elements of the monitoring and early warning system are maintained through the budget of respective ministries, agencies, and institutes. Some equipment, infrastructure and training programmes are financed as part of international projects, including EU structural funds. In addition, the Inter-agency Commission for Recovery and Assistance (ICRA) to the Council of Ministers has an annual budget of 70-90 mln. BGN, approximately 0.1 percent of the GDP, to finance “the prevention, containment, and overcoming the consequence of disasters.”³⁵⁰

Bulgaria has some crisis management capabilities of potential interest to the EU and other MSs, such as medium search and rescue units for urban environments, medium CBRN units, and land units for fighting forest fires, as well as the FSCP training range in the town of Montana. Mobile medical teams

³⁴⁹ A separate Crisis Management Law enacted in 2005 treated issues of interest to DRIVER. It was cancelled in 2009 and is not examined in detail here.

³⁵⁰ See for example the Law on the State Budget of the Republic of Bulgaria for 2014, *State Gazette* 109, 20 December 2013, article 1(2), item 4.1.1.

of the Military Medical Academy are regularly deployed abroad in disaster response operations. In 2015, a Sofia-based Centre of Excellence in Crisis Management and Disaster Response has been accredited by the North-Atlantic Council.

Table of Contents

B U L G A R I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	333
Overview.....	334
Table of Contents	336
List of Figures	338
List of Tables.....	338
List of Abbreviations.....	339
1 Policy	341
1.1 Risk Assessment	342
1.2 Policy and Governance	353
1.2.1 Strategy scope and focus	354
1.2.2 Policy for Response	355
1.2.3 Monitoring and analytical support to policy making; R&D	355
1.2.4 Policy for Prevention	357
1.2.5 Policy for Preparedness	361
1.2.6 Policy for Relief and Recovery	362
1.3 Financing	362
1.3.1 Investing in preparedness	362
1.3.2 Investing in consequence management	364
1.4 Policy review, Evaluation & Organisational Learning	365
1.4.1 Post-Disaster Assessment	365
1.4.2 Departmental Lessons Learned systems	365
1.4.3 Centralised (national) Lessons Learned system	365
1.4.4 International exchange for Lessons Learned	365
1.4.5 Regular policy reviews	366
1.5 Resilience	367
1.6 Information sharing and data protection	367
2 Legislation	369
2.1 Crisis (emergency, disaster) management concept.....	369
2.2 General crisis (emergency, disaster) management law	369
2.3 Emergency rule	370

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	372
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	373
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	373
2.7	Legal regulations for international engagements of first responders and crisis managers	374
3	Organisation	375
3.1	Organisational chart.....	375
3.2	Organisational cooperation	382
4	Procedures	387
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	387
4.2	Operations planning.....	387
4.3	Logistics support in crises	388
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	389
5	Capabilities	391
5.1	Human resources	391
5.2	Materiel (non-financial) resources	392
5.3	Training	394
5.4	Procurement	394
5.4.1	Procurement regulations	394
5.4.2	Procurement procedures	396
5.5	Niche capabilities	396
	Resources	397
	Legislative acts	397
	Other normative acts	398
	Official documents (white papers, strategies, etc.)	399
	Online resources	400
	Publications	401
	Expert interviews	402

List of Figures

<i>Figure 1: Gamma-background Bulletin.</i>	343
<i>Figure 2: Radiation Emergencies (events per year) for the period 1998-2006.</i>	344
<i>Figure 3: Seismic events in Bulgaria and adjacent earthquake zones.</i>	344
<i>Figure 4: Natural Disaster Occurrence, reported by Bulgaria.</i>	348
<i>Figure 5: Exposure of Bulgaria to Earthquake hazards.</i>	348
<i>Figure 6: Map of seismic hazards showing maximum values of acceleration of the ground in (g) with a period of repeatability 475 years.</i>	350
<i>Figure 7: Map of the risk of flooding for the city of Plovdiv, threshold depths.</i>	352
<i>Figure 8: Map of the risk of flooding for the city of Plovdiv, depth of flooding.</i>	353
<i>Figure 9: Map of main seismic areas in Bulgaria.</i>	358
<i>Figure 10: Territorial distribution of landslides by municipality.</i>	359
<i>Figure 11: Coverage of the four Basin Directorates.</i>	360
<i>Figure 12: High-level crisis management arrangements.</i>	376
<i>Figure 13: MOI General Directorate "Fire Safety and Civil Protection."</i>	378
<i>Figure 14: Military aerial search and rescue during the floods in September 2014.</i>	379
<i>Figure 15: Operational Coordination in Crisis Management and Disaster Response.</i>	384
<i>Figure 16: The network of seismic stations of the national seismological service.</i>	393

List of Tables

<i>Table 1. FSPB statistics on disasters, incidents, and rescue mission, 2011-2014.</i>	343
<i>Table 2. Earthquakes in Bulgaria and adjacent areas since the beginning of the 20th Century with a magnitude over 5.</i>	345
<i>Table 3. Crisis events for 2010-2013 – total for the country.</i>	346
<i>Table 4. Overview of natural Disasters in Bulgaria from 1980 - 2010.</i>	347
<i>Table 5. Procurement of goods and services, thresholds and types of tenders.</i>	395

List of Abbreviations

BAS	Bulgarian Academy of Sciences
BGN	Lev (the Bulgarian currency)
CBRN	Chemical, Biological, Radiological, and Nuclear [protection]
CECIS	Common Emergency and Information System (EU)
CIS	Communications and Information Systems
CM	Crisis Management
CMDR	Crisis Management and Disaster Response
COE	Centre of Excellence
EADRCC	Euro-Atlantic Disaster Response Coordination Centre (NATO)
ECURIE	European Community Urgent Radiological Information Exchange
EERC	European Emergency Response Capacity
ERCC	Emergency Response Coordination Centre (EU; formerly MIC)
FSCP	Fire Safety and Civil Protection (MOI General Directorate)
HFA	Hyogo Framework for Action
IAEA	International Atomic Energy Agency
ICPPDAC	Interagency Commission on Protection of the Population in Disasters, Accidents, and Catastrophes (not existing currently; replaced by ICRA)
ICRA	Interagency Commission for Recovery and Assistance
MES	Ministry of the Emergency Situations
MIC	Monitoring and information Centre (EU; now ERCC)
MOD	Ministry of Defence
MOI	Ministry of the Interior
MUSAR	Medium Search and Rescue [unit]
NDPP	National Disaster Protection Plan
NIGGG	National Institute of Geophysics, Geodesy and Geography
NPP	Nuclear Power Plant
NSEWA	National System for Early Warning and Alerts
POL	Petroleum, Oil, and Lubricants
REMPAN	Radiation Emergency Medical Preparedness and Assistance Network
RODOS	Real On-line DecisiOn Support System
RRMMT	Rapid Reaction Military Medical Team

TOE	Table of Organisation and Equipment
UNISDR	The United Nations Office for Disaster Risk Reduction
URS	Unified Rescue Service
WMD	Weapons of Mass Destruction
WWII	World War II

1 Policy

Bulgaria is a parliamentary republic. The People's Assembly (Bulgaria's single chamber Parliament) elects and discharges the Prime Minister and, on his or her proposal, all other Ministers. The formulation of policies, including the policy for disaster preparedness and response, is in the realm of this most senior body of the Executive branch power.

Head of state is generally elected President, who is also Supreme Commander of the Armed Forces. The President chairs the Consultative Council on National Security, composed of the leaders of the political parties represented in parliament. The executive powers of the President are largely limited to appointment of heads of diplomatic delegations/embassies, highest ranking military personnel and, when this is required by law, civil servants,³⁵¹ and signing international treaties.³⁵² In all these cases, the President acts on the proposal by the Council of Ministers.

When the Parliament is not in session, the President declares war, given an armed aggression against the country or the need for urgent implementation of international obligations, military or *another extraordinary situation*. In such cases the Parliament convenes immediately to decide on the President's declaration.³⁵³

Bulgaria is a unitary state with local self-governance.³⁵⁴ Currently, the country has 28 regions, each consisting of municipalities. Chapter 7 of the Constitution provides the grounds for local self-governance and administration. Each municipality has a Municipal Council, a Mayor, and its own budget. The Constitution also stipulates obligations of the citizens "to assist the state and society in the case of a natural or another disaster following legally defined regulations."³⁵⁵

Bulgaria does not have a crisis management policy document *per se*. In addition to the constitutional provisions, the foundations of CM policy are set in the Disaster Protection Act, while details emerge in the examination of a number of strategies, regulations, mid-term programmes, short-term implementation plans, organisational acts and resource allocation decisions.

Chapter 1 of the Disaster Protection Act defines 'disaster' as

*considerable disruption of the normal functioning of the society caused by natural phenomena and/or human activities, and leading to negative consequences for the life and the health of the population, property, economy and the environment, the prevention, containment and overcoming of which exceeds the capacity of the system for serving the common activities for societal protection.*³⁵⁶

The law defines the main principles of disaster protection:

1. Each person has the right to protection;
2. Saving human life has a priority over other protection activities;

³⁵¹ Mostly, the highest ranking professionals in the security ministries and agencies.

³⁵² Constitution of the Republic of Bulgaria, Articles 98, 99, 100.

³⁵³ Ibid., Article 100(5).

³⁵⁴ Ibid., Article 2(1).

³⁵⁵ Ibid., Article 61

³⁵⁶ Disaster Protection Act, article 2.

3. Provision of public information on disaster risks and the activities of the executive bodies for disaster protection;
4. Priority of the preventive measures in disaster protection;
5. Accountability for the implementation of the protective measures;
6. Gradual provision of forces and resources for protection.

The law—and respectively, the policy—treat the protection of life or health of the population, the environment and the property. Disaster protection involves executive bodies, legal entities and physical trade persons, coordinated in a Unified Rescue System, acting on a national, regional, and municipal level through:

- conducting preventive activities;
- conducting activities for protection during disasters;
- assistance and recovery;
- allocating resources;
- providing and accepting aid.

Thus, Bulgaria's crisis management policy aims to provide effective coordination and use of national and local, public and private resources, as well as assistance provided through international co-operation, to prevent crises and, when prevention fails, protect life and property during and immediately following a crisis triggered by natural disasters or man-made catastrophes. The respective crisis response is triggered whenever a disaster affecting the country, regions or local communities cannot be controlled through routine, daily and normal channels and procedures.

1.1 Risk Assessment

Data on recent disasters and other crisis event

Information on disasters is regularly reported by relevant Bulgarian ministries and agencies and is available to the public and international organizations and initiatives.

The website of General Directorate "Fire Safety and Civil Protection" (FSCP) provides annual statistical reports, available online for 2008 and the following years.³⁵⁷ While providing some information on natural disasters and industrial catastrophes, it is heavily focused on preventing fires and firefighting. The statistics provided by FSCP is detailed by region. For aggregated information for 2011-2014 see Table 14.

The Ministry of Environment and Water, through its own website or the websites of the four Basin Directorates, provides partial information on past floods. For example, the Basin Directorate for the Danube region provides an Excel file with information on 745 floods in that basin for the last century. 602 of those floods are assessed as being of significance for the respective town or village.

According to Regulation # 8 on the conditions and procedures for protecting forest territories from fires, the Executive Director of the Executive Agency "Forestry"³⁵⁸ "creates and maintains an information system with a database on fires for all forest territories with the aim to have the necessary statistical information."³⁵⁹

³⁵⁷ See www.nspbzn.mvr.bg/Sprav_informacia/Statistika/default.htm.

³⁵⁸ The name is translated into English on its official website as "Executive Forest Agency." See www.nug.bg/lang/2/index.

³⁵⁹ Article 12 /3/ of Regulation # 8 on the conditions and procedures for protecting forest territories from fires.

Table 14. FSPB statistics on disasters, incidents, and rescue mission, 2011-2014.³⁶⁰

	2011	2012	2013	2014
Natural disasters	154	700	70	703
Accidents	10	170	218	206
Home and industrial incidents	556	415	419	469
Incidents with dangerous substances and materials	681	643	487	465
Incidents with radiation sources	0	18	11	16
Total:	3412	3958	3218	3873
Assistance, search and/or rescue missions	n/a	456	376	586

The Nuclear Regulatory Agency publishes daily bulletins on the gamma background on the territory of the country (see an illustration on Figure 54), information on events in nuclear facilities³⁶¹ and reports on incidents with radiation sources, with a short description, lessons learned and recommendations.³⁶²

Academic publications by the Agency's experts add to the statistics and the analysis of individual cases. See for example Figure 55 for earlier statistics on incidents with radiation sources and brief description of key incidents in the article cited.³⁶³

**Figure 54: Gamma-background Bulletin.**

³⁶⁰ Based on the annual statistical reports at www.nspbzn.mvr.bg/Sprav_informacia/Statistika/default.htm.

³⁶¹ See www.bnra.bg/en/emergency/nuclear-facilitie/npp-events, listing three events in the Kozloduy Nuclear Power Plant, respectively in 21 December 2013, 14 April 2014 and 23 April 2014 (accessed 09 December 2014).

³⁶² See for example "Incident with a gamma - irradiation facility in the town of Stamboliyski," Nuclear Regulatory Agency, available in English at http://www.bnra.bg/en/emergency/20110729-en?set_language=en (accessed 28 October 2014).

³⁶³ Nizamska, Marina. "Analysis of the Reasons for Incidents with Radioactive Sources in Bulgaria and Preventive Measures." *Information & Security: An International Journal* 24 (2009): 115-124, <http://dx.doi.org/10.11610/isij.2411>.

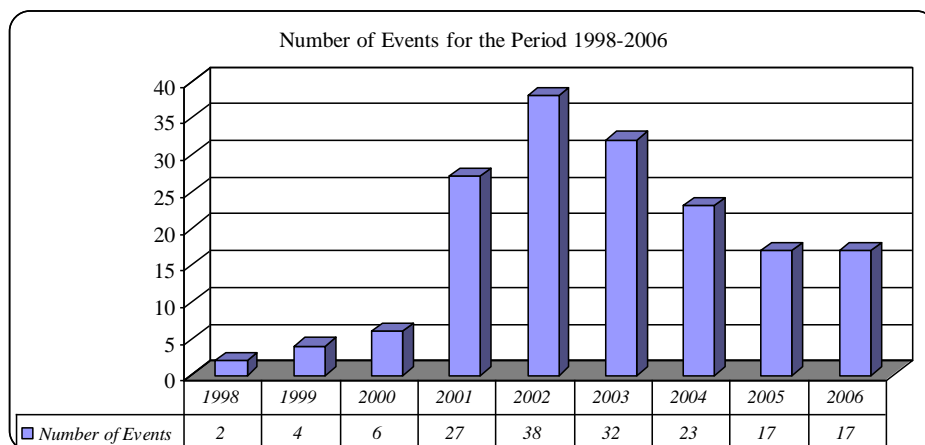


Figure 55: Radiation Emergencies (events per year) for the period 1998-2006.

The National Institute of Geophysics, Geodesy and Geography (NIGGG) at the Bulgarian Academy of Sciences provides real time information of seismic activity in Bulgaria and adjacent areas (see Figure 56 for the status as of 10 December 2014³⁶⁴). NIGGG provides feeds to international networks that track and provide statistics on earthquakes.

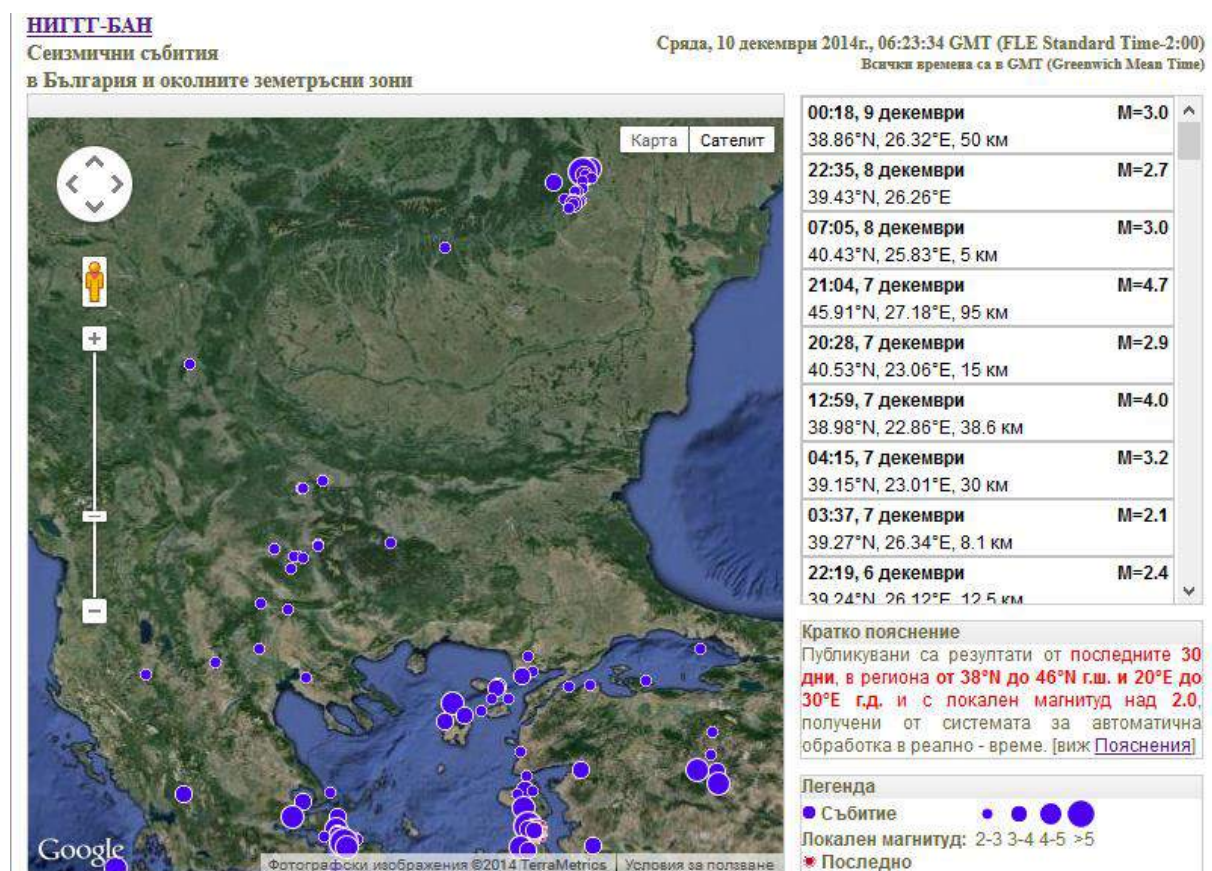


Figure 56: Seismic events in Bulgaria and adjacent earthquake zones.

³⁶⁴ For current information see <http://ndc.niggg.bas.bg>.

NIGGG researchers regularly publish related data and their data- and evidence-based findings. See for example Table 15 for the strongest earthquakes in Bulgaria since the beginning of the 20th Century.³⁶⁵ A common conclusion in these studies is that—within Europe—Bulgaria is among the countries most vulnerable to earthquakes.³⁶⁶

Table 15. Earthquakes in Bulgaria and adjacent areas since the beginning of the 20th Century with a magnitude over 5.

Date	Location	Magnitude on the Richter scale
31 March 1901	b/n Shabla and cape Kaliakra	7,2
4 April 1904	in the Struma river valley	7,8
8 October 1905	along the Struma river	6,4
10 January 1908	Gorna Oriahovitsa	7,0
14 April 1909	Gorna Oriahovitsa	7,0
14 June 1913	Gorna Oriahovitsa	7,0
18 October 1917	Sofia	5,3
14 April 1928	Chirpan	6,9
18 April 1928	Popovitsa	7,0
25 April 1928	Galabovo	5,6
17 March 1942	Razgrad	7,0
30 June 1956	Shabla	5,5
4 March 1977	Vrancha, Romania	7,2
3 November 1977	Velingrad	5,3
28 February 1986	Strazhitsa	5,1
7 December 1986	Popovo	5,7
27 October 2004	230 km NE of Sofia, on the territory of Romania	5,5
22 May 2012	Pernik	5,6

The National Statistical Institute publishes statistical studies on disasters, their causes and consequences, including assessment of material losses and their monetary value, assistance provided by the Interagency Commission for Recovery and Assistance, insurance premiums and paid compensations from insurers.³⁶⁷ Aggregated data for years 2010-2013 is presented on Table 16.

³⁶⁵ See Alexander N. Sadovski, "Spatial Analysis of Earthquakes in Bulgaria and Neighboring Areas," *Ecological Engineering and Environment Protection* 14, no. 2 (2014): 13-21 (in Bulgarian) and references therein. For older events, as well as earthquakes with magnitude between 4 and 5, see http://bg.wikipedia.org/wiki/Земетресения_в_България.

³⁶⁶ Ibid.

³⁶⁷ National Statistical Institute, available at <http://www.nsi.bg/bg/node/2891>.

Table 16. Crisis events for 2010-2013 – total for the country.

Indicators	Number of events				Stated losses, in thousand BGN				Amount to be restored, in thousand BGN		
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012
Crises event – TOTAL	4571	8268	10826	2728	100594	487254	106160	443067	74047	424127	36167
Fires	1630	2185	3010	764	2239	2186	1437	2013	479	192	47
Landslides	59	76	72	51	2182	224790	17384	294459	1881	221735	3651
Earthquakes	12	4	22	6	224	0	59037	915	506	232	17960
Draught	6	30	23	3	1	117	149	0	1	0	0
Floods	651	382	692	547	38882	206659	20898	15285	16375	201136	9855
Storms, tornados, whirlwinds	47	48	528	89	54722	1614	3488	99387	53791	257	1787
Hail	16	13	14	13	505	50150	187	0	318	120	147
Snowstorms (snow-drifts)	103	94	93	50	441	1205	945	200	366	266	868
Icing, frostbites	18	134	186	20	0	128	135	0	0	25	132
Accidents	7	24	312	314	24	39	319	257	77	26	318
Catastrophes with vehicles	1937	5218	5858	841	926	285	2164	528	14	82	1402
Contamination	45	42	7	19	2	68	8	30023	0	45	0
Epidemics (people)	12	7	7	6	0	0	0	0	0	0	0
Epidemics (animals, incl. birds)	5	2	0	1	0	2	0	0	0	0	0
Calamities	2	0	0	2	30	0	0	0	45	0	0
Other disasters and crisis events	21	9	2	2	416	11	9	0	194	11	0

International organisations and initiatives can serve as additional sources for statistics on crises and disasters in Bulgaria, as well as their impact. Although based on information provided by Bulgarian authorities, these sources may be more useful for research purposes due to the common language, data structure, user-friendly online interface, etc. One such source is the UN Hyogo Framework for Action (HFA) – a 10-year plan to build resilience of nations and communities to disasters.³⁶⁸ The *PreventionWeb* site provides respective disaster statistics for the 30-year period from 1980 till 2010. An overview of the number of events and their consequences is presented in Table 17.³⁶⁹ The top events of significance and the respective statistics on their occurrence are presented on Figure 57.³⁷⁰ The same source provides data on the top 10 natural disasters, the numbers of people killed and affected, and the estimated economic damages.³⁷¹

Table 17. Overview of natural Disasters in Bulgaria from 1980 - 2010.

Number of events:	34
Number of people killed:	111
Average killed per year:	4
Number of people affected:	23,566
Average affected per year:	760
Economic Damage (US\$ X 1,000):	478,104
Economic Damage per year (US\$ X 1,000):	15,42

The United Nations Office for Disaster Risk Reduction (UNISDR) maintains a database with visualisation tools of exposures to risks. A sample of the Global Risk Update 2013, featuring human and economic exposure to earthquakes, is presented on Figure 58.³⁷²

The global assessment reports on disaster risk reduction are built on the information in DesInventar – disaster information management system maintained by UNISDR. UNISDR provides software that allows to construct databases capturing information on damage, loss and general effects of disasters. Bulgaria is interested in this opportunity to better understand disaster trends and their impacts, and achieve better prevention, mitigation and preparedness,³⁷³ but data on Bulgaria is not available on the DesInventar website at the time of preparing this report.

³⁶⁸ See www.unisdr.org/we/coordinate/hfa.

³⁶⁹ See www.preventionweb.net/english/countries/statistics/?cid=26.

³⁷⁰ Ibid.

³⁷¹ The criteria for including an event in the database are defined by EM-DAT – The International Disaster Database, maintained by the Centre for the Research on the Epidemiology of Disasters in Brussels, www.emdat.be/criteria-and-definition.

³⁷² Global Assessment Report on Disaster Risk Reduction 2013, Global Risk Update GAR 2013, available at <http://risk.preventionweb.net:8080/capraviewer/main.jsp?tab=0>.

³⁷³ Interview with an expert from FSCP General Directorate, 10 November 2014.

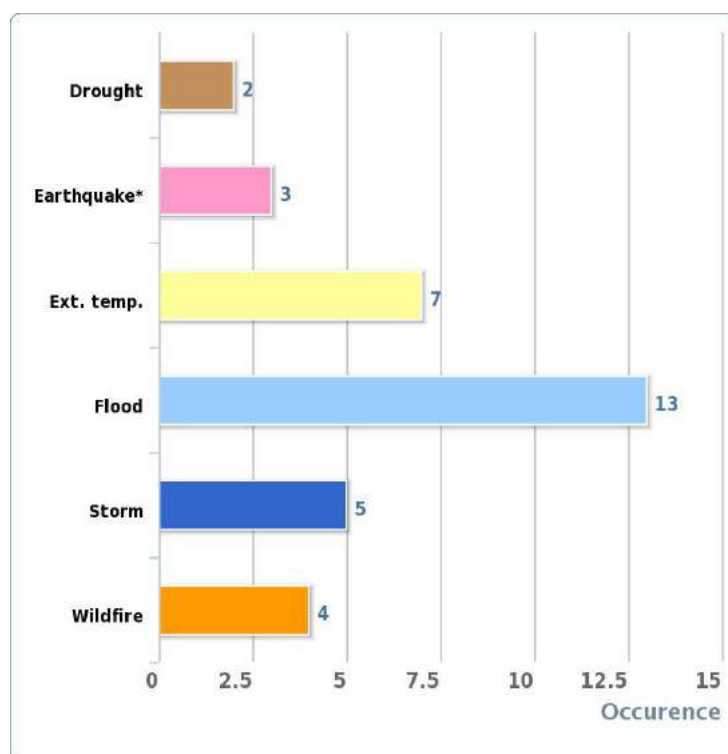


Figure 57: Natural Disaster Occurrence, reported by Bulgaria.



Figure 58: Exposure of Bulgaria to Earthquake hazards.

Conducting Risk Assessments and Examples

There is a growing understanding that a systematic approach to disaster data collection and analysis can facilitate better policy-making and thus to the reduction of disaster risks and enhanced response to disasters.³⁷⁴ For example, the *Strategy for Mitigating Disaster Risks 2014-2020* includes a 15-page annex with overview of key disaster risks, supported by aggregated data, and their likely impact given our prediction ability, prevention and mitigation measures.³⁷⁵

Currently, the analysis, assessment and mapping of disaster risks are seen in Bulgaria as key preventive activities.³⁷⁶ They are implemented in accordance with the *Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks*.³⁷⁷ This normative document, approved by the Council of Ministers in October 2012, designates the following risks as subject of analysis, assessment and mapping:³⁷⁸

- seismic risk;
- risk of flooding;
- risk of nuclear or radiation accident;
- geological risk (landslides, landslips, active faults, and other geological processes);
- risk of forest fires.

Risks are analysed and assessed every six years, unless a specific law defines another term for reassessment. They can be re-examined given a change with potentially significant impact on the risk, if the data and information on which assessment has been made invalid or inadequate, if the negative consequences of actual disasters are higher or of different type than the ones forecasted, or based on lessons learned from past disasters.

The responsible bodies for analysis and assessment are as follows:³⁷⁹

- the Minister for Regional Development – for the seismic and geological risks;
- the Chairman of the Nuclear Regulatory Agency – for the risk of nuclear and radiation accidents;
- the Minister of Environment and Water, through the directors of Basin Directorates – for the risk of flooding;
- the Minister of Agriculture and Food – for the risk of forest fires.

The risk mapping follows the requirements of the EU Directive 2007/2/EC (INSPIRE) and other relevant requirements and standards.

The risk maps need to indicate the threatened territories and the likely negative consequences expressed through the following indicators:³⁸⁰

³⁷⁴ Interview with a FSCP expert.

³⁷⁵ *Strategy for Mitigating Disaster Risks 2014-2020*, available at <http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=894> (in Bulgarian).

³⁷⁶ Disaster Protection Act, article 6(1), items 1 and 2.

³⁷⁷ Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks, *State Gazette* 84 (2 November 2012), as amended in *State Gazette* 9 (31 January 2014).

³⁷⁸ Ibid., article 1(2).

³⁷⁹ Ibid., article 2.

³⁸⁰ Ibid., article 5(3).

1. the approximate number of potentially endangered citizens (casualties, injured, or with their health under threat);
2. material losses;
3. affected technical infrastructure
4. affected economic activities in the respective area;
5. affected industrial installations (defined in Annex 4 to the Environmental Protection Law);
6. areas for water protection (identified in Article 119a(1) of the Law on Waters);
7. potentially affected areas under Article 6 of the Law on Biological Diversity;
8. the level of disruption of the normal functioning of society;
9. sites with the stature of immovable cultural values;
10. other information considered useful by the relevant bodies.

Article 6(8) of the Regulation declares that the disaster risk maps are public and are announced on the MOI website, while adhering to the requirements of the Law on Protection of Classified Information.³⁸¹ By the beginning of 2015, it was possible to find publically available information on just a few actual risk maps. In January 2014 the Regulation on mapping disaster risks was amended, extending the deadline for analysis and assessment of disaster risks till the end of 2015.

Partial results are nevertheless useful and being used in informing policy decisions. For example, Figure 59 provides an indication of seismic risks on the territory of Bulgaria³⁸² (understanding also that earthquakes in the Vrancea region of Romania, northern Greece or western Turkey may also have destructive effects on Bulgarian territory). Governmental assessments of earthquake and other seismic hazards and risks are complemented by rigorous academic studies on Bulgaria, such as those of Tzenov and Botev (2009) and Bayliss and Burton (2013).



Figure 59: Map of seismic hazards showing maximum values of acceleration of the ground in (g) with a period of repeatability 475 years.

³⁸¹ Translated also as *Classified Information Protection Act*.

³⁸² See the annex on p. 13 in Bulgarian State Standard EN 1998-1/NA, available in Bulgarian at http://www.bds-bg.org/images/upload/Nacionalni_prilozenia/BDS_EN_1998-1_NA.pdf (accessed 8 December 2014). The same map is included in Annex 64 to the National Plan for Disaster Protection (2010), p. 371.

Most advanced is the process of mapping the risk of flooding. Risk mapping is performed by the four regional Basin Directorates (part of the Ministry of Environment and Water) and partially financed by the European Union. Two maps are included below for illustrative purposes. Colours on Figure 60 indicate threshold depths for a medium probability flooding of the city of Plovdiv (the second biggest Bulgarian city, built on the banks of river Maritsa). The blue colours on the map on Figure 61 show the depth of flooding under the same assumptions.

Researchers contribute to the assessment and mapping of the risk of flooding both in terms of methods and their specific implementation, e.g. assessing risks of flooding for the population along the Black Sea coast,³⁸³ estimating flood prone territories along river basins,³⁸⁴ etc.

On this background, the analysis, assessment and mapping of the risk of forest fires lag behind. A report of the National Audit Office, covering the period 2011-2103 makes such a statement with the addition that “There is no approved methodology and the risks of forest fires have not been analysed. No organisational unit within the Ministry of Agriculture and Forests and/or Executive Agency “Forestry” has been tasked to analyse and assess the risks of forest fires and their consequent mapping.”³⁸⁵

³⁸³ Atanas Palazov and Hristo Stanchev. "Risks for the Population along the Bulgarian Black Sea Coast from Flooding Caused by Extreme Rise of Sea Level." *Information & Security: An International Journal* 24 (2009): 65-75, <http://dx.doi.org/10.11610/isij.2407>.

³⁸⁴ M. Nikolova et al. "Implementation of the “KINEROS” Model for Estimation of the Flood Prone Territories in the Malki Iskar River Basin." *Information & Security: An International Journal* 24 (2009): 76-88, <http://dx.doi.org/10.11610/isij.2408>.

³⁸⁵ Audit Report # 0300002413 on “Prevention and Response to Forest Fires” for the period 1 January 2011 – 31 December 2013, Bulgarian National Audit Office (15 October 2014). – in Bulgarian, quote on p. 11.

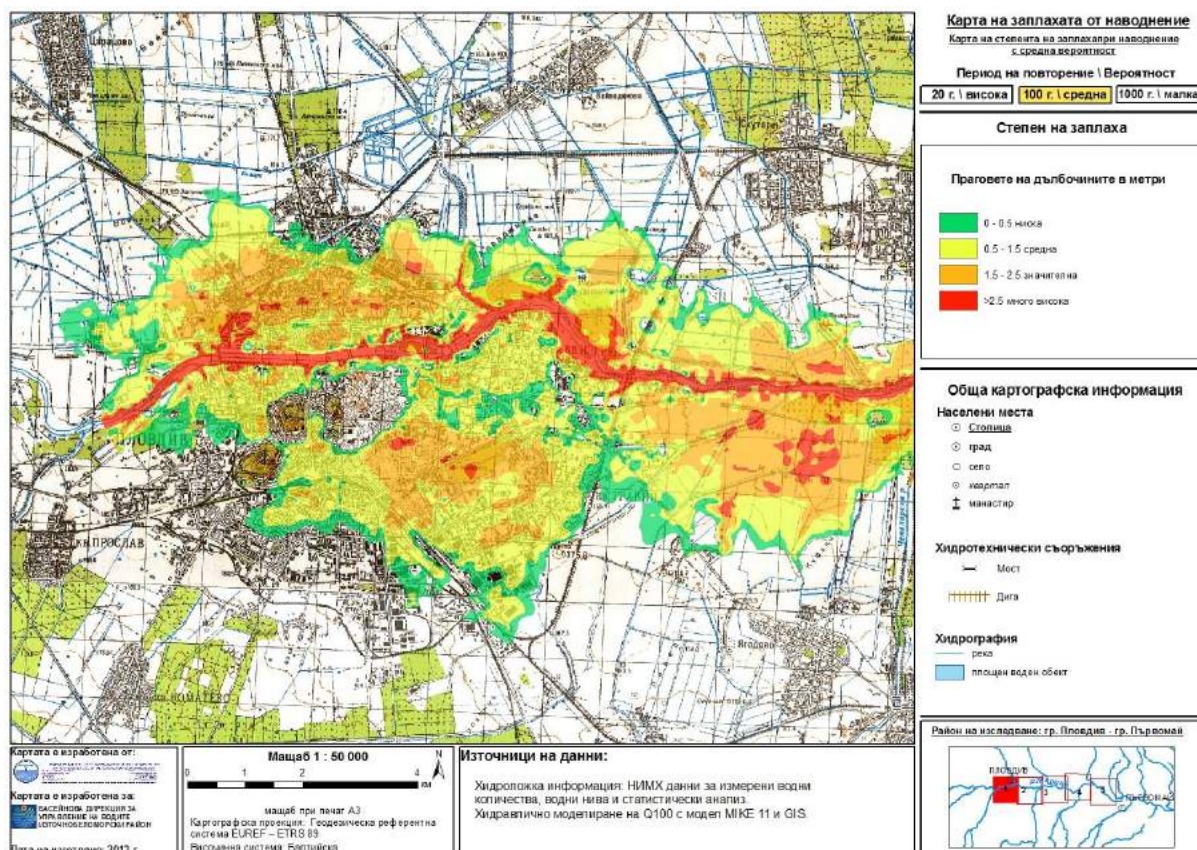


Figure 60: Map of the risk of flooding for the city of Plovdiv, threshold depths.

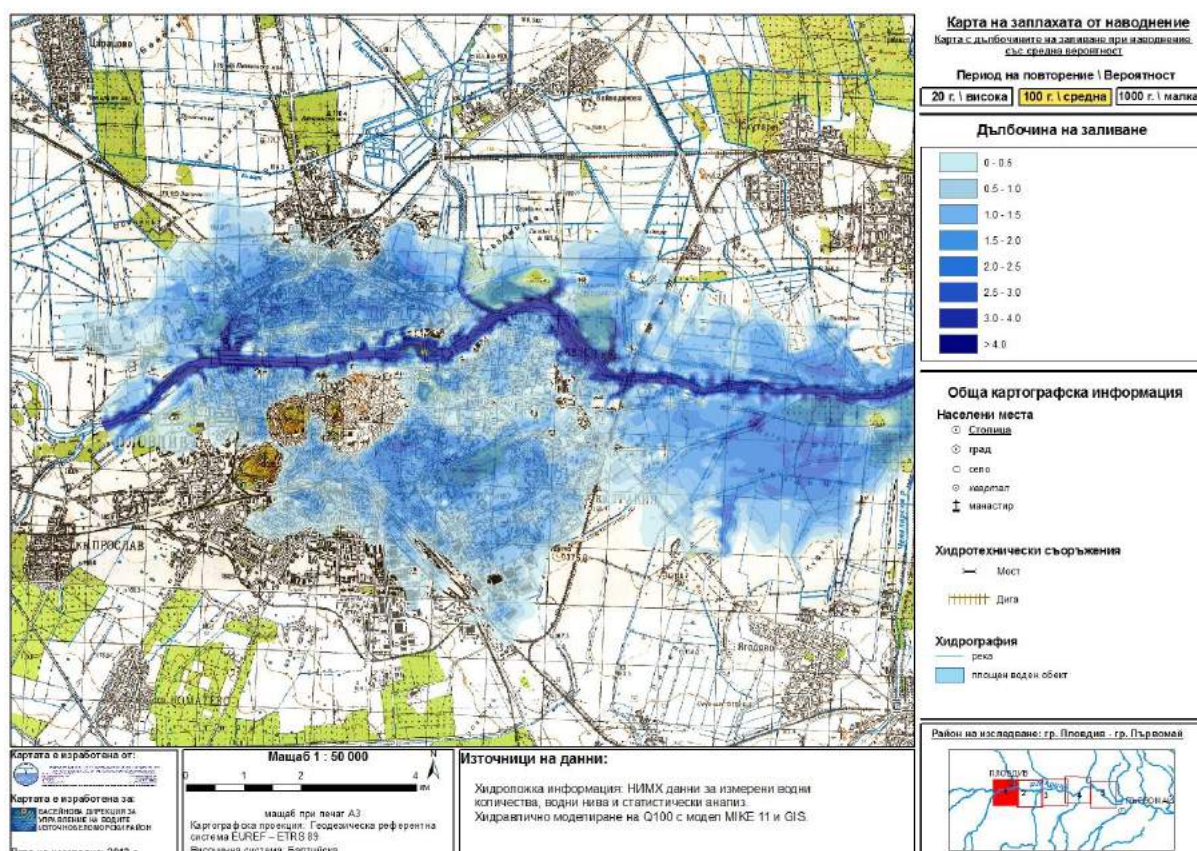


Figure 61: Map of the risk of flooding for the city of Plovdiv, depth of flooding.

1.2 Policy and Governance

The national disaster prevention and response framework envisions distributed crisis management within a Unified Rescue System, emphasising local preparedness and response by public bodies and the capabilities of the executive (providing also for engagement of companies and nongovernmental, including volunteer organisations).

The country's policy on disaster protection is formulated by the Council of Ministers.³⁸⁶ This most senior executive body adopts a strategy for mitigating disaster risks, the national programme for disaster protection and annual plans for its implementation, as well as a National Plan for Disaster Protection.

Disaster protection is performed on national, regional and municipal levels³⁸⁷ and includes prevention, protection measures when a disaster occurs, assistance and recovery.³⁸⁸ Each region and each municipality have their own disaster protection plans.

The response to disasters is organised through the Unified Rescue System (URS), which includes structures of ministries and agencies, municipalities, trade companies, non-governmental organisations, including organisations of volunteers, and the armed forces. All these structures preserve their institutional and organisational affiliation, as well as their assigned mission and functions.³⁸⁹

When a disaster occurs, the authority at the respective level and place (mayor, regional governor, Council of Ministers) enacts the relevant disaster protection plan. The expectation is that the local authority and locally present organisations react first. The disaster protection plans arrange for the cooperation among the components of the Unified Rescue System (URS) and provide opportunities for gradual involvement of additional forces and means with the evolution of the crisis situation.³⁹⁰

The framework for managing the response is as follows:

- Leader³⁹¹ on the site of the disaster is the Head of the respective territorial unit of the FSCP General Directorate or another officer³⁹² assigned by him or her.³⁹³
- The coordination of the URS components is assigned to the operational centres of General Directorate "Fire Safety and Civil Protection" (see Figure 66 in section 3.1 below).
- On the request³⁹⁴ by the leader (commander) on the site of the disaster, the mayor of the municipality or the regional governor, the operations centres organise the engagement of

³⁸⁶ Disaster Protection Act, article 62(1).

³⁸⁷ Bulgaria is a unitary state with 28 regions (region = 'oblast/ област') and 256 municipalities.

³⁸⁸ Disaster Protection Act, article 5. Disaster protection includes also "resource allocation" and "provision and acceptance of aid."

³⁸⁹ Disaster Protection Act, article 20.

³⁹⁰ Disaster Protection Act, article 26.

³⁹¹ Or "manager." The word used in Bulgarian is "rakovoditel/ ръководител." ISO 22320 uses the term "Incident Commander."

³⁹² Or "official." The term used in Bulgarian is "dlajnostno litse/ длъжностно лице."

³⁹³ Disaster Protection Act, article 31(2). The exception is in cases of epidemics or epizootics, when the leader on the site is the head of the regional health inspection or of the "Food Safety" Regional Directorate. See Disaster Protection Act, article 31(3).

URS components, designated in the disaster response plans, as well as additional forces and means.³⁹⁵

- The leader on the site is responsible for the cooperation and coordination of URS components, participating in rescue and urgent recovery activities in the area of the disaster.³⁹⁶

The following sub-sections provide details on this policy framework.

1.2.1 Strategy scope and focus

A Crisis Management Concept was developed by an interagency working group at the turn of this century. It was discussed among ministries and agencies involved, but never formally endorsed. The experience was useful in clarifying strategic issues and drafting the *Crisis Management Law* (adopted in early 2005; repealed in May 2009).

Currently, there is no document presenting an explicit strategy for crisis management of Bulgaria. Nevertheless, the strategy can be glimpsed by analysing other documents, in particular the Disaster Protection Act and the strategy for mitigating disaster risks.

The Disaster Protection Act treats the activities of prevention (Chapter 2), the response via the Unified Rescue System (Chapter 3), assistance and recovery (Chapter 6).

Resilience is a new concept, not yet fully implemented. One visible gap, for example, is in addressing *community resilience*.³⁹⁷ Nevertheless, some conceptual elements have been addressed over the years, e.g. the planning of the territory, consideration of the risk of flooding in managing water and related infrastructure,³⁹⁸ maintaining collective and individual protection kits, etc. Furthermore, a number of goals, in line of the Hyogo Framework for Action that aims to build resilience of nations and communities to disasters, have been reflected in the national risk mitigation strategy. One example is the stated objective to develop a national strategy for adaptation to climate change.³⁹⁹

The strategy for mitigation of disaster risks declares as a strategic goal “the prevention and/or reduction of the negative consequences for human health, socio-economic activity, environment and cultural heritage in Bulgaria as a result of disasters of natural or technogenic origin.”⁴⁰⁰ Four priorities are declared in the same document:

1. Developing a sustainable national policy and provision of a stable legal and institutional framework for disaster risk reduction;
2. Identification, assessment and monitoring of disaster risks. Enhancing and maintaining effective national systems for prediction, monitoring, early warning, and disaster alerts;

³⁹⁴ It is expected that such request is made when locally available capabilities are not sufficient to cope with the disaster.

³⁹⁵ Disaster Protection Act, article 29(2)4.

³⁹⁶ Disaster Protection Act, article 31(1).

³⁹⁷ RAND defines ‘community resilience’ as “a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations.” See featured topic “Community resilience,” Available at www.rand.org/topics/community-resilience.html (accessed 27 November 2014).

³⁹⁸ Law on Waters, Article 10(3).

³⁹⁹ *Strategy for Mitigating Disaster Risks 2014-2020*, p. 19.

⁴⁰⁰ *Strategy for Mitigating Disaster Risks 2014-2020*, quote on p. 18, in Bulgarian.

3. Building a culture of disaster protection at all management levels and in society by utilising the experience, education, scientific research and innovation;
4. Reducing the key risk factors and increasing the readiness for effective response to disasters at all management levels.

Based on the declared priorities one could infer that risk assessment and prevention are in the focus of Bulgaria's disaster response strategy.⁴⁰¹

1.2.2 Policy for Response

The guiding principle is that the response is initiated and led locally, and involves locally present actors, including local authorities, public organisations, companies and non-governmental organizations. Additional capabilities and resources are provided if and when necessary. The armed forces provide support to rescue and urgent emergency recovery with the permission of the Minister of Defence on the request of the respective state body in accordance with the disaster protection plans. The main response framework is through the Unified Rescue System (URS), described in Chapter 3 of the Disaster Protection Act.

The activities under a threat or the occurrence of a disaster are:⁴⁰²

1. Warning;
2. Implementation of urgent measures to reduce disaster's impact;
3. Alert;
4. Rescue operations;
5. Delivery of urgent medical assistance;
6. Delivery of urgent psychological assistance to injured people and the rescue teams;
7. Containment and elimination of ecological incidents;
8. Protection against explosives and ammunition;
9. Search and rescue operations;
10. Radiation, chemical and biological protection in incidents and accidents with dangerous substances;
11. Containing and extinguishing fires;
12. Temporary evacuation, sheltering and delivery of means of protection;
13. Conducting urgent emergency recovery works;
14. Containing and eliminating occurring outbreaks, epidemics, and epizootics of contagious and parasitic diseases;
15. Other operations related to disaster protection.

1.2.3 Monitoring and analytical support to policy making; R&D

In practice, Bulgarian authorities implement an approach to policy making, based on regular reviews of risks, planning, and implementation. The reviews are focused exclusively on "disaster protection"

⁴⁰¹ An inference that was confirmed in an interview with an expert from the FSCP General Directorate.

⁴⁰² Ibid., Article 19. The law states also that in times of war, military or emergency situation the protection measures need to abide to the Geneva Conventions and the respective Additional Protocols.

and lead to consequent five-year programmes, e.g. National Programme for Disaster Protection 2009-2013, followed by the National Programme for Disaster Protection 2014-2018. Annual reviews and updates lead to the adoption of (and are usually included in) annual plans, e.g. the *Annual Plan for 2014 for the Implementation of the National Programme for Disaster Protection 2014-2018*.

As an established practice, non-governmental organisations, e.g. volunteer organisations and research institutes are involved in the annual reviews and drafting the national programmes and the annual plans for their implementation.

Notwithstanding available good practice and experience, Bulgaria's Caretaker Government (6 August-6 November 2014) assessed the policies made as inadequate and requested a peer-review of the system for disaster prevention and response and assessment of the country's crisis management capabilities through the EU civil protection mechanism.⁴⁰³

Scientific Support

In the period of 2004-2007, through the Interagency Commission on Protection of the Population in Disasters, Accidents, and Catastrophes (ICPPDAC), Bulgaria implemented a rigorous research programme with the aim to identify suitable crisis management strategies, legal and organisational arrangements, and enhance its prevention and early warning capabilities.⁴⁰⁴ One example is the study on alternative emergency management architectures, resulting in a set of recommendations on further development of the country's crisis management system.⁴⁰⁵

Since then, however, there is no dedicated research programme to support crisis management and disaster response.⁴⁰⁶ Occasionally, relevant projects initiated by the research community are financed by Bulgaria's National Science Fund, or Bulgarian scientists contribute to international research programmes and projects.

For scientific expertise, the MOI General Directorate FSCP relies on its contacts with the following research organizations:

- Centre for National Security and Defence Research, Bulgarian Academy of Sciences (BAS), for policy studies;
- National Institute for Meteorology and Hydrology, BAS, for meteorological and hydrological studies, current information and forecasts;
- National Institute for Geophysics, Geodesy and Geography, BAS, for monitoring seismic activity and related studies;
- Institute of Information and Communication Technologies, BAS, for operational analysis, computer assisted exercises, and modelling of complex phenomena;

⁴⁰³ https://press.mvr.bg/news/news150209_03.htm. The review is scheduled for mid-2015 and will be conducted in the framework of the EU Civil Protection mechanism.

⁴⁰⁴ Shalamanov, Velizar, ed., *Security Research and Change Management in the Security Sector* (Sofia: Demetra, 2008). – in Bulgarian.

⁴⁰⁵ Shalamanov, Velizar, Stefan Hadjitodorov, Todor Tagarev, Nikolay Pavlov, Valentin Stoyanov, Pencho Geneshky, and Stoyan Avramov. "Civil Security: Architectural Approach in Emergency Management Transformation." *Information & Security: An International Journal* 17 (2005): 75-101, <http://dx.doi.org/10.11610/isij.1706>.

⁴⁰⁶ The FSCP website has a section on "Applied scientific and expert activity," representing the in-house capacity to define fire safety requirements and support control and certification.

- Institute of Mathematics and Informatics, BAS, for mathematical modelling and decision support;
- Institute for Space and Solar-Terrestrial Research, BAS, for aerospace monitoring;
- The group of chemistry institutes of the Bulgarian Academy of Sciences, for issues of CBRN protection;
- Faculty of Geology and Geography of Sofia University “St. Kliment Ohridski,” for seismic studies, remote sensing expertise, etc.

1.2.4 Policy for Prevention

According to article 6(1) of the Disaster Protection Act the goal of prevention is to reduce the risk of disasters. The prevention includes:

1. Analysis and assessment of disaster risks;
2. Mapping disaster risks;
3. Categorisation of towns and villages depending on the number of people potentially affected;
4. Identification of critical infrastructures and sites and assessing respective risks;
5. Measures for protection of critical infrastructures;
6. Planning of disaster protection;
7. Adhering to the requirements of territory planning, investments design, construction and exploitation of building sites;
8. Development and maintenance of the systems for monitoring, early warning and alerts;
9. Provision of collective and individual protection means;
10. Training and practical preparedness of central and territorial bodies of the executive, response forces, volunteer formations and the population;
11. Adopting and implementing a National programme for disaster protection.

Policy for Prevention: Analysis, Assessment, Mapping of Disaster Risks

The responsible authorities for items 1 and 2 are as follows:

- for seismic and geological risks – the Minister for Regional Development;
- for the risk of nuclear and radiation accidents – the Chairman of the Nuclear Regulatory Agency;
- for the risk of forest fires – the Minister of Agriculture and Food;
- for the risk of flooding – the Minister of Environment and Water, through the directors of Basin Directorates.

The same institutions approve the methodologies for analysing and assessing the respective risk. In addition, the analysis and assessment of the risk of nuclear and radiation accidents needs to adhere to the *Law on the Safe Use of Nuclear Energy* and related norms, while the analysis and assessment of the flooding risk need to be in line with the *Law on Waters* and the relevant norms of its implementation.

Annex 1 to the National Disaster Protection Plan (NDPP), issued in 2012, is dedicated to the protection of earthquakes. It provides analysis of the risk of earthquakes, highlighting the risk of shallow quakes (depth at less than 60 km) in three main seismic areas:

- Northeastern, including the zones of Gorna Orahovitsa, Shabla and Dulovo;
- The area of Sredna Gora, including the zones of Sofia, the Maritsa river, the Tundja river, and the sub-Balkan zone;
- The area of the Rila and Rodopi mountains, including the zones of the Struma and Mesta rivers, and the zone in the Western Rodopi mountain around the town of Velingrad.

These seismic areas, with indication of plausible scenarios of maximum intensity according to the Medvedev–Sponheuer–Karnik-64 scale, is provided on Figure 62 below.

Annex 1 to NDPP details the obligations in earthquake protection of 12 ministers, the heads of the state reserves and nuclear regulation agencies, the Chairperson of the Bulgarian organization of Red Cross, two academic institutes, governors, mayors, trade companies, non-government organisations and individual citizens.

Landslides are also common, but statistically not on a scale that may cause a significant crisis. They are also subject of assessment and risk management studies.⁴⁰⁷ The National Programme for Disaster Protection 2014-2018 provides an overview of landslides per region and municipality. See the map on Figure 63 for the territorial distribution of landslides by municipality.⁴⁰⁸



Figure 62: Map of main seismic areas in Bulgaria.

⁴⁰⁷ See for example to project *RISK management of natural and anthropogenic landslides in the Greek-Bulgarian cross-border area*, RISKSLIDES, within the “European Territorial Cooperation” Operational Programme Greece - Bulgaria 2007-2013. Available at www.clmc.bas.bg/risklides (accessed 3 December 2014).

⁴⁰⁸ National Programme for Disaster Protection 2014-2018, p. 29.

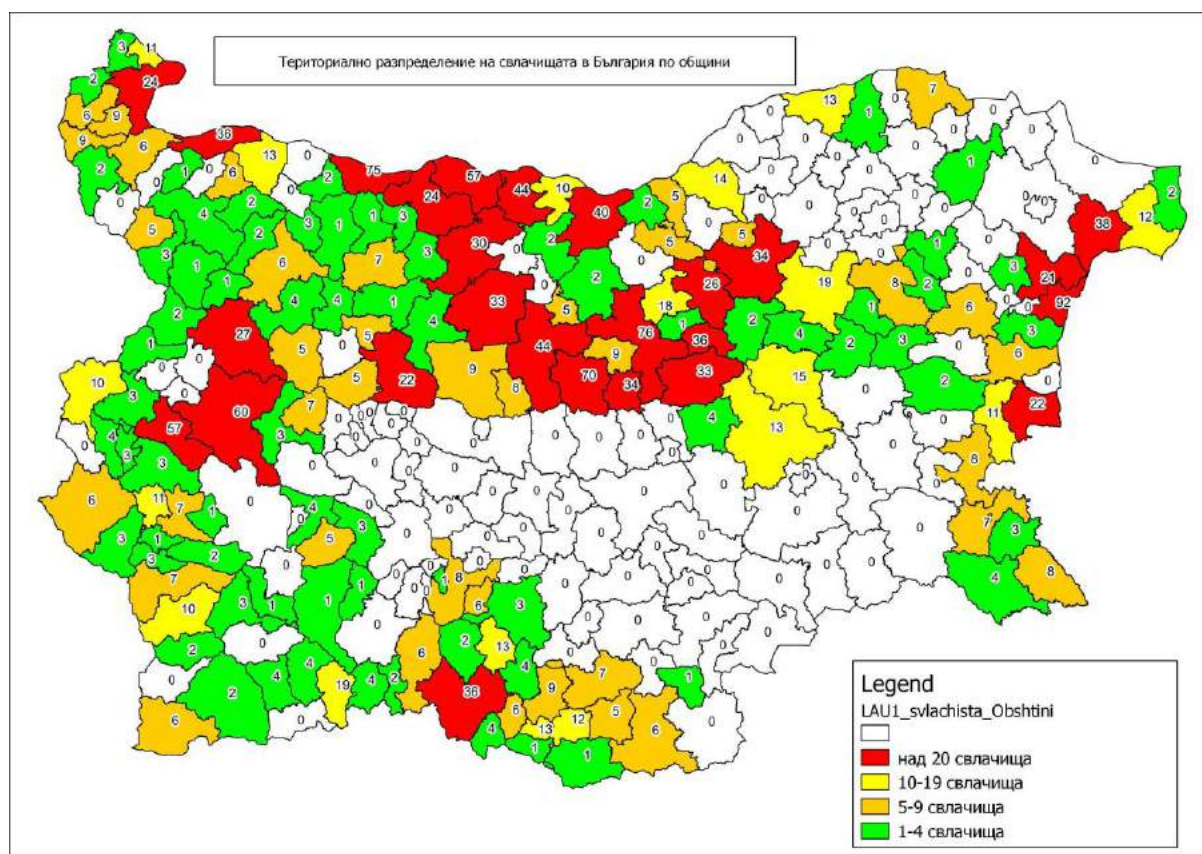


Figure 63: Territorial distribution of landslides by municipality.

The largest potential nuclear and radiation risk, originating on the territory of Bulgaria, relates to scenarios for Nuclear Power Plant (NPP) Kozloduy. Plausible scenarios, their potential impact and the response are described in great detail in Supplement 3 “External plan for accidents in Kozloduy NPP” (a 231 page document) of the standing National Disaster Protection plan. In addition, the nuclear power plant has its own plan to respond to various accidents.⁴⁰⁹

The risk of fires is addressed in NDPP, that examines large fires in industrial enterprises, sites of the critical infrastructure, forests and agricultural lands (in particular at the time of harvesting). The mountainous forests in Strandja-Sakar, Rila and Rodopi mountains, Sredna Gora and the southern slopes of the Balkan mountain are listed as particularly vulnerable, along with the regions of Haskovo, Stara Zagora, Blagoevgrad, Sofia, Pazardjik, Plovdiv, Yambol, and Burgas.

The risk of flooding is assessed as high along the rivers Danube, Maritsa, Tundja, Mesta, Iskar, Arda, Kamchia and others. The most recent experience shows, that under certain conditions, e.g. in heavy rainfalls in the summer and the fall, even small rivers can cause significant damage and human casualties. Technogenic floods, e.g. as a result of destruction of the dams Iskar, Batak, Trakiets, Ogosta, and Toplnitsa, can also have catastrophic consequences, since they could flood areas of 910 km² with 650 thousand inhabitants.⁴¹⁰

The four regional Basin Directorates (part of the Ministry of Environment and Water) are in the process of finalizing the mapping of risks of flooding and transition to the development of respective risk

⁴⁰⁹ See www.kznpp.org/index.php?lang=en&p=safety&p1=emergency.

⁴¹⁰ National Disaster Protection plan (2010), p. 6.

management plans. One example is project BG161PO005/12/1.20/02/29 “Developing plans for management of the risk of flooding” of the basin directorate for the Danube region.⁴¹¹

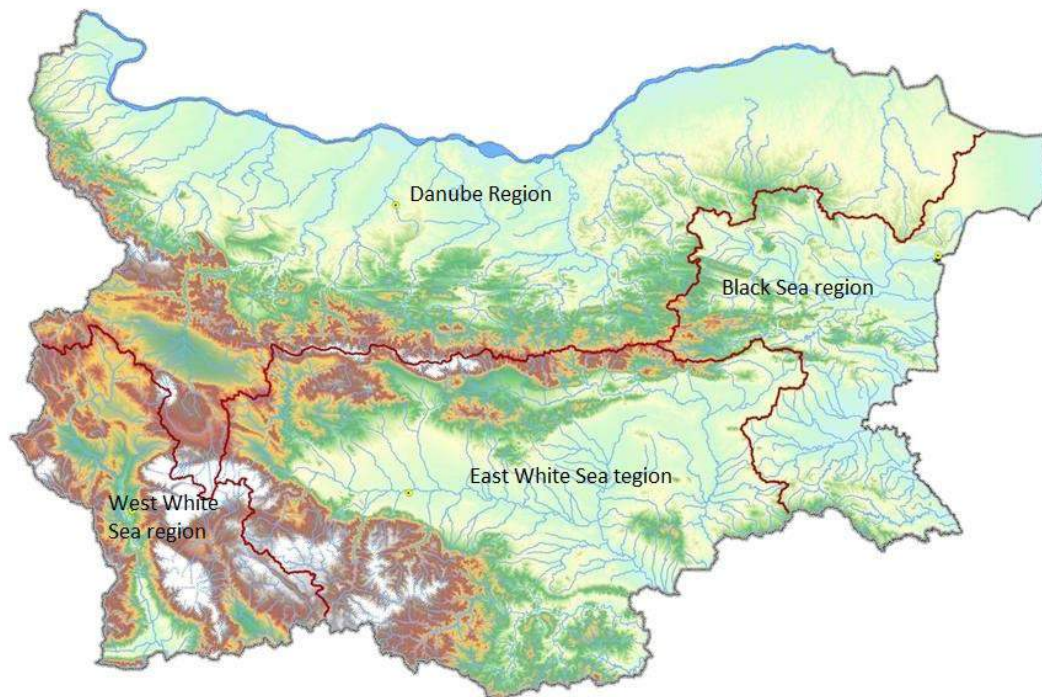


Figure 64: Coverage of the four Basin Directorates.

In addition to these risks, NDPP treats also the risks of trans-border radiation (e.g. in case of an accident in the Cernavodă NPP in Romania), incidents with vehicle transporting radioactive materials, industrial accidents followed by dissemination of dangerous substance, draught, strong winds and whirlwinds, heavy snowfalls, snowstorms and icing, accidents with maritime, vessels, trains and vehicles, terrorist acts and unexploded ordnance.⁴¹²

Policy for Prevention: Categorisation of Towns

Item # 3 on the list of legally required prevention activities—categorisation of towns and villages depending on the number of people potentially affected—is defined in the Disaster Protection Act. In the same Act, the population centres are categorised in six groups:

- the cities of Sofia, Plovdiv, Varna, Russe, and Burgass;
- other cities with population above 80 thousand;
- cities with population between 30 and 80 thousand
- cities and conurbations with population between 10 and 30 thousand
- conurbations with population below 10 thousand.

According to the Disaster Protection Act, the identification of critical infrastructures and sites and the assessment of respective risks is also a preventive measure. The *Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the*

⁴¹¹ See www.bd-dunav.org/content/proekti-i-programi (in Bulgarian) for details.

⁴¹² NDPP, pp. 8-17.

risk for them assigns the task of identification to the respective ministers and agency heads, who create standing working groups, while local authorities (governors, mayors) also collect and present relevant information.

The following set of criteria is used to assess the criticality of infrastructures and their elements:

- potential number of people killed and/or injured;
- potential economic consequences – losses, lower quality of products and services, environmental impact;
- potential societal consequences – impact on public confidence, physical suffering, disruption of everyday life, including the loss of main services.

The assessment of the risk for designated critical infrastructures⁴¹³ and assets is conducted by their owners or operators based on a methodology, developed by the standing working groups following the guidance of the Minister of the Interior. Every owner/operator of critical infrastructures or their elements must take measures to reduce their vulnerability to natural and technogenic dangers.⁴¹⁴

The remaining disaster protection activities will be examined below in this section of the report.

1.2.5 Policy for Preparedness

The policy for preparedness focuses on planning, as mandated in section II of Chapter 3 of the Disaster Protection Act, and training with regard to the Unified Rescue System (URS). Other texts in the law define requirements for disaster protection education in schools and universities, planning by companies, non-governmental and volunteer organizations, and training of their personnel.

The preparedness of URS components is assured by training and exercises. According to the Act, trainings are aimed at assessing the status of the communication and information system and the readiness of teams to react to disasters. The planning and conducting exercises serve to improve the cooperation and coordination among the URS components and with the executive bodies in their reaction to disasters. Trainings and exercises can be organised by the order of the Minister of the Interior, a regional governor, or the mayor of a municipality.⁴¹⁵

Preparedness, along with resilience, is enhanced by including volunteer formations and the population in training central and territorial bodies of the executive and response forces, the development and maintenance of the systems for monitoring, early warning and alerts, as well as legal obligations for adhering to the requirements of territory planning, investments design, construction and exploitation of building sites.

⁴¹³ Annex 2 to the Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them defines 19 sectors of critical infrastructure: energy; transport; information and communication technologies; postal and courier services; environment; agriculture and foods; health services; finance; economy; sports sites and installations; education, science and technologies; natural resources; tourism; regional development and infrastructure; defence; justice, home affairs and security; state and social governance; disaster protection; cultural heritage. The same designates a responsible ministry for each sector and sub-sector.

⁴¹⁴ Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them, article 13(3).

⁴¹⁵ Disaster Protection Act, Article 28.

1.2.6 Policy for Relief and Recovery

Relief and recovery include delivery of urgent and recovery assistance to the distressed people and urgent recovery works after the disaster.

The urgent assistance is organised and delivered by the mayors and includes:⁴¹⁶

- Feeding and providing temporary shelter to the distressed people, pets and livestock;
- Distributing clothing and household ware to the distressed people;
- Undertaking other necessary measures.

The recovery assistance involves primarily construction measures and repairs of damaged homes. They may include also destruction of buildings that, as a result of the disaster, have become unusable and dangerous.

The Disaster Protection Act authorises the Interagency Commission for Recovery and Assistance to make decisions and oversee the provision of state funding for recovery (as well as for prevention and urgent assistance necessary to contain a disaster).

1.3 Financing

1.3.1 Investing in preparedness

The main assets for crisis management and disaster response are part of the executive branch, provided for through the state budget. The FSCP General Directorate in MOI is the organisation with primary crisis/disaster management responsibilities. It is financed within the MOI budget by the programme “Fire safety and population protection in fires, disasters and emergency situations.”⁴¹⁷ The approximate amounts for this programme are:⁴¹⁸ 161.5 mln. BGN for 2013; 144 mln. for 2014; and 143 mln. BGN for 2015.⁴¹⁹

A number of agencies with key disaster management capabilities are also financed through the state budget. Among them are the Nuclear Regulatory Agency, the Basin Directorates in the Ministry of Environment and Water, Executive Agency “Forestry,” Executive Environment Agency, the National Centre of Radiobiology and Radiation Protection (Ministry of Health) and others.⁴²⁰

Several research institutes of the Bulgarian Academy of Sciences, most notably the National Institute for Meteorology and Hydrology and the National Institute for Geophysics, Geodesy and Geography, perform operational activities such as 24/7 monitoring, early warning, and forecasting. These types of activities are financed by the state budget through the budget of the Bulgarian Academy of Sciences.

⁴¹⁶ Disaster Protection Act, Article 55(2).

⁴¹⁷ For 2013 the name of the programme is “Provision of state fire control, fire safety and rescue, disaster protection and early alert.”

⁴¹⁸ Draft budget for 2014 of the Ministry of the Interior and updated budget forecast for 2015 and 2016 in programme format (in Bulgarian), available at www.mvr.bg/NR/rdonlyres/92521007-BCE9-44BB-8FBB-352156486003/0/Programen_format_budjet_MVR_2014.pdf (accessed 20 October 2014).

⁴¹⁹ The exchange rate to the Euro is fixed at 1.9558 BGN for 1 Euro.

⁴²⁰ These agencies perform other functions as well, and it is not possible to estimate precisely the portion of their budget that supports their crisis management and disaster response capabilities.

The country allocates a budget for the creation and maintenance of “crisis stocks” of materiel and petroleum, oil, and lubricants (POL) to provide for population protection in disasters.⁴²¹

Investments in disaster preparedness and response capabilities are regularly financed by EU funds through the operational programmes, with partial national contribution from the state budget. A sample of such projects includes:

- “Technical provision of the operational units on the FSCP General Directorate of the MOI for containing and extinguishing fires,” with approximately 49 mln. Euro (15 percent national co-financing) in the Operational Programme “Environment”⁴²²;
- “Enhancing the capacity of the operational units on the FSCP General Directorate of the MOI for reaction to flooding,” project DIR 51214001-2-193 with approximately 49 mln. Euro (15 percent national co-financing) in the Operational Programme “Environment.”⁴²³

Other projects with partial support from the European Union facilitate the transfer of good practices from the EU, development of the digital communications and information system, training (including training in project management and other aspects of good governance), testing, experimentation and certification, risk assessment and mapping. A number of projects are implemented in bi-lateral frameworks and aim to establish and/or strengthen trans-border cooperation in disaster preparedness and response.

Similar investments are included in the plans for the new EU programming period 2014-2020 through the instruments addressing agriculture (in view of the forest fires), environment (e.g. for risk mitigation), territorial development (e.g. for mapping disaster risks, preparedness, etc.).

The total project-based financing of this type over the last three years is estimated at 150 mln. Euro.⁴²⁴ The agencies and institutes with crisis management responsibilities, listed above, also implement research, capacity building and infrastructure development projects with international funding.

The Ministry of Defence occasionally invests in specific disaster management capabilities, e.g. equipping helicopters for firefighting, through the defence budget. In case of a need, MOD is expected to provide some of its ‘dual use’ capabilities, e.g. deactivation and de-contamination capabilities.

Local authorities at municipal level are expected to finance disaster prevention, preparedness and response through the municipal budget, while trade companies should finance the sites and assets they are responsible for.⁴²⁵ Currently, however, the level of local investments is estimated as rather low compared to the financing from the state budget. Possible exceptions are the municipalities of Sofia and some of the other biggest cities, but no aggregated data is available.

Finally, in the beginning of each year, the Interagency Commission for Recovery and Assistance (ICRA) decides to allocate a certain portion of the contingency budget (see the next section). For 2010 and 2011 ICRA decided to dedicate 15 percent of that budget to prevention activities, and increased it to 20 percent in 2012.⁴²⁶ However, no explicit decisions have been made for 2013 and 2014, mostly due to the numerous requests for recovery assistance after the 2012 earthquake in Pernik.

⁴²¹ Disaster Protection Act, Article 59, para 8.

⁴²² See www.nspbzn.mvr.bg/Proekti/Info+pojari.htm (in Bulgarian).

⁴²³ See www.nspbzn.mvr.bg/Proekti/Proekt-navodnenia.htm (in Bulgarian).

⁴²⁴ Interview with a senior expert from the FSCP General Directorate.

⁴²⁵ Disaster Protection Act, Article 61.

⁴²⁶ ICRA’s Protocols and decisions, available in Bulgarian at www.nspbzn.mvr.bg/Sprav_informacia/Mejduvedomstvena_komisija/default.htm.

1.3.2 Investing in consequence management

Typically, the Law on the State Budget, in its section on “Reserves for unforeseen and/or urgent expenditure” includes a separate line “for prevention, containment and overcoming the consequences of disasters.”⁴²⁷ In recent years, as well as in the 2015 state budget, the dedicated amount for that purpose is 70 mln. BGN.

This budget is managed by the Interagency Commission for Recovery and Assistance, which decides on requests by line ministries (mainly for recovery of unforeseen expenses for activities in actual disasters) and local authorities (for the actual recovery of buildings and infrastructures damaged as result of a disaster or for the destruction of facilities that have become unusable and dangerous due to a disaster). There is no formally prescribed rationale for deciding on how to distribute the available funding, or which of the numerous requests for recovery assistance to authorise. ICRA’s decisions in that regard are made largely in an *ad-hoc* manner.

When the losses as a consequence of a disaster are significant, the EU also provides recovery assistance. For example, after the floods in the summer and the autumn of 2014 the European Commission has agreed to compensate Bulgaria’s losses.⁴²⁸ The expected assistance amounts to no less than 10.5 mln. Euro.⁴²⁹

Insurance companies do not play such a significant role in the recovery, since insuring property and critical assets is not legally mandatory. To address this issue, a roundtable with insurers was organised recently.⁴³⁰

By law, the Bulgarian Red Cross is subsidised by the state⁴³¹ and is authorised to use some exceptions regarding taxes and payments, as a whole and for its employees.⁴³² The subsidy for 2014 is 3.1 mln. BGN.⁴³³

To remedy the consequences for people who suffer as a result of disasters, many organizations and individuals donate money, food, bottled water, clothing and other items either directly, or through the Bulgarian Red Cross and other organisations and campaigns. The monetary value of these donations easily exceeds several million levs.⁴³⁴

* * *

In total, a rough estimate of the annual expenditures of public actors on prevention, preparedness and response points to 400 mln. BGN (based on the figures in this Chapter), or about 0.5 % of the GDP of the country. This amount does not include the costs of preparedness of the armed forces and

⁴²⁷ Line 4.1.1 of the Law on the State Budget 2014.

⁴²⁸ The agreed compensation formula is “2.5 % of the direct losses under ‘the large disaster threshold’ + 6 % of the losses above the threshold.” The threshold for Bulgaria in 2014 is 232.5 mln. Euro. See “The European Commission recognised all compensations for the floods in Bulgaria,” *Trud*, 1 December 2014, available at www.trud.bg/Article.asp?ArticleId=4454903 (in Bulgarian).

⁴²⁹ CROSS News Agency, 17 December 2014.

⁴³⁰ Interview with a senior FSCP expert.

⁴³¹ Law on the Bulgaria Red Cross, Article 6(1).

⁴³² *Ibid.*, Article 7.

⁴³³ Law on the State Budget of the Republic of Bulgaria for 2014, Annex 4 to Article 49, item # 1.

⁴³⁴ Till mid-November 2014 the Bulgarian Red Cross received donations of 2 million BGN to provide assistance to people suffering from the floods. See www.redcross.bg/floods_bulgaria2014.html (in Bulgarian).

sustainment costs of the “security” departments and officers in all line ministries, regional and municipal administrations, nor the financing needed to create and maintain crisis reserves of materials, food, fuel, etc.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

As an established practice, each individual emergency or a disaster is followed by an analysis and a formal report on reasons, consequences and recommendations. One example is the report of a working group, tasked by the Municipal Council of Varna to study the flood on 19 June 2014 that led to 13 casualties and considerable damages of the infrastructure.⁴³⁵ The report itself is 13 pages long, while the official website of the Varna municipality provides access to 218 pages in total with the report, annexes, photos, maps and the official statements by concerned stakeholders as a reaction to the report.⁴³⁶

1.4.2 Departmental Lessons Learned systems

There are no formal departmental Lessons Learned systems in place in ministries and other key stakeholder organisations, with partial exception of the Ministry of Defence.

1.4.3 Centralised (national) Lessons Learned system

There is no formal centralised (national) Lessons Learned system. Nevertheless, the analysis and assessment of disaster risks—key input information for the development of the national programme for disaster protection and the annual plans for its implementation—are based on past emergencies and disasters.

In the process of developing the national programme for disaster protection and the annual implementation plans stakeholders, represented in the respective working groups, exchange information on past experience—both negative and experience considered as good practice—and critical issues of common concern. FSCP General Directorate coordinates at working level the development of plans and programmes and thus facilitates the exchange of information.

1.4.4 International exchange for Lessons Learned

Bulgaria participates in international activities aiming to evaluate the experience of crisis management and disaster response and learn from it. The main forums of exchange of lessons learned information are:

⁴³⁵ Report of the Working group, created with the objective to clarify the reasons for the tragedy on 19 June 2014 and define measures to prevent future disasters, 18 July 2014, Available in Bulgarian at the official website of Varna municipality, www.varna.bg/bg/getfile.html/id/75a7c30fc0063c4952d7eb044a3c0897 (accessed 2 December 2014).

⁴³⁶ Ibid.

- The European Union Civil Protection mechanism via DG ECHO;
- The NATO Civil Emergency Planning mechanism and the Euro-Atlantic Disaster Response Coordination Centre.

Through FSCP, Bulgaria provides information in the Hyogo Framework for action,⁴³⁷ but does not exchange information through DesInventar – the disaster information management system maintained by UNISDR.

Bulgaria is active in a number of regional and bi-lateral formats of information exchange, such as:

- Strategic project RISK – Joint monitoring of the risk in emergency situations in the trans-border region of the Danube river, www.nspbzn.mvr.bg/Proekti/RISK+info.htm;
- SEERISK – Joint assessment of risk of disasters and readiness in the Danube micro-region, www.nspbzn.mvr.bg/Proekti/SEERISK.htm;
- The Disaster Preparedness and Prevention Initiative for South Eastern Europe, www.dppi.info;
- The Black Sea Earthquake Safety Net(work) – ESNET, <http://esnet.infp.ro/en>;
- CBCAID – Bulgaria-Turkey trans-border cooperation in industrial accidents, www.nspbzn.mvr.bg/Proekti/CBCAID.htm;
- Enhancing fire safety along the border between Bulgaria and Greece, www.nspbzn.mvr.bg/Proekti/Proekt_BG2003_005-630-04.htm, etc.

All these projects involve exchange of information, including lessons learned.

1.4.5 Regular policy reviews

There is no legally mandated requirement to conduct rigorous, comprehensive reviews of the national crisis management and disaster response policy.⁴³⁸ Nevertheless, the country implements a cyclic review, leading to the adoption of five-year national programmes for disaster protection (e.g. for the periods 2009-2013, and then for 2014-2018), and annual plans for implementation of the current programme. All concerned ministries, regional authorities, key non-governmental organisations and research institutes are involved in the development of the programme and the implementation plans.

Local communities, through their representatives in Municipal Councils, have the opportunity to contribute to the development of the respective standing disaster protection plans.

However, there are no aggregated reports on the implementation of these plans and programmes (thus, missing an opportunity for rigorous parliamentary and societal scrutiny).

⁴³⁷ See www.preventionweb.net/english/countries/statistics/?cid=26.

⁴³⁸ Unlike, for example, the field of defence, where every few years Bulgaria conducts a “Strategic Defence Review” (the titles may differ), followed by the adoption of White paper of defence and the armed forces, and accompanied by annual reports of the Executive to Parliament on the status of defence and the armed forces.

1.5 Resilience

The term ‘resilience’ is not translated directly to Bulgarian,⁴³⁹ and the concept of resilience is not well known.

Nevertheless, there are a number of activities and legal requirements in line with the concept of resilience.

First, the *Strategy for Mitigating Disaster Risks 2014-2020* follows the Hyogo Framework for Action with its 10-year plan to build resilience of nations and communities to disasters.⁴⁴⁰ The strategy focuses on identifying, assessing, prioritizing, monitoring and mitigating disaster risks. It calls for moral responsibility and responsibility to the society of all leadership levels for mitigating disaster risks, strengthening the culture of prevention, openness, transparency, and cooperation, as well as to increase awareness and participation of the population in disaster risk reduction activities.⁴⁴¹

Secondly, a number of regulations call for preparation and obligations of citizens and companies during disasters (to be examined in Chapter 2 of this report). Educational programmes are in place to prepare school and university students for a disaster response.

Third, key items are kept in stock to be used in case of a disaster. That includes foodstuff, tents and blankets, iodine, vaccines, etc. Also, collective and individual protection means are maintained for such cases.

Finally, ISO 22301:2012 “Business Continuity Management – Requirements” has been translated and introduced as a national standard. A number of training events took place, and several consultancy companies provide training on ISO 22301:2012 in combination with the British Standard PAS 200:2011 “Crisis management – Guidance and good practice” and ISO 27001 “Information Security Management.”

1.6 Information sharing and data protection

Data protection and information sharing

Municipal social services and humanitarian organisations maintain registries on people with particular disabilities, but this information is not centralised.⁴⁴² Hence, any requests to share personal data during crises or for crisis management purposes need to be addressed to the respective social services or humanitarian organisations.

The derogation of the legislation with regard to data protection is not included among the rights that can be constraint temporarily in a disaster situation.⁴⁴³

However, the Law on Protection of Personal Data stipulates that personal data can be processed when “this is necessary to protect the life and health of a physical person about whom is the data.”⁴⁴⁴ The same Law states that the processing can be performed by an “Administrator of personal data” —

⁴³⁹ It is often translated as “stability / устойчивост.”

⁴⁴⁰ www.unisdr.org/we/coordinate/hfa.

⁴⁴¹ *Strategy for Mitigating Disaster Risks 2014-2020*, p. 7, p. 21.

⁴⁴² To the extent the authors are aware.

⁴⁴³ Enumerated in Article 52 of the Disaster Protection Act.

⁴⁴⁴ Law on Protection of Personal Data, Article 4(1), para 4.

a physical or legal entity, a body of the state power or local self-governance—which, alone or jointly with another entity, defines the purposes and means of processing personal data, when these purposes and means are constraint by law.⁴⁴⁵

The sharing of classified information—internally, within the European Union and with third states/ organisations—follows the requirements of the Classified Information Protection Act and respective sub-legal norms. The legislation related to classified information has been adapted first to NATO requirements, and is generally considered to be in line with corresponding EU norms.

Registry of volunteers

The legal provisions for the use of volunteers and volunteer formations are fairly recent. In the short period of about three years in which they are in force, 162 formations were created, and FSCP provides public access to the respective registry.⁴⁴⁶ The registry provides data on the authorised⁴⁴⁷ and the actual strength of each formation by municipality. No aggregated data on particular capabilities, level of readiness and contact information is publically available.

The Registry has to contain information on groups within the volunteer formation along types of activity,⁴⁴⁸ and that information should be public, but this requirement is not yet implemented.

The work with the Registry shall abide to the requirements of the Law on Personal Data Protection. Hence, while the Registry contains the names and the Unified Identification Number of each volunteer, this information is not public.

Use of social media

Currently, Bulgaria has no plans to use data gathered from social media during crises. It nevertheless envisions a role for a citizen in providing information and data, via the National System for Emergency Calls 112 or otherwise, as a basis for monitoring, early warning, and alerts.⁴⁴⁹ Hence, there are no legal obstacles to use other technical venues, including social networks, as a way to provide disaster related information.

⁴⁴⁵ Ibid., Article 3(1) and (2).

⁴⁴⁶ See www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm. As of 19 December 2014 the registry can be downloaded at www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_19122014g.pdf.

⁴⁴⁷ As explained in the footnote to the Registry, the authorised strength is based on statistical data on the population in the municipality, as related to its distance from the component parts of the Unified Rescue System. The authorised strength is defined by Decision # 327 of the Council of Ministers of 25 April 2012.

⁴⁴⁸ Regulation Iz-1669 of 17 August 2012 on the order of creating and maintaining a registry on the volunteer formations for overcoming or containing disasters, fires, and emergency situations and elimination of their consequences, Article 9(1), para 8.

⁴⁴⁹ Disaster Protection Act, Article 11(1), para 1.

2 Legislation

The *Constitution of the Republic of Bulgaria* is the founding Act defining, *inter alia*, main rights and responsibilities of the citizens, authorities and cases in which they can declare war or another emergency ('extraordinary') situation, as well as the citizens' rights that cannot be derogated in such cases.

2.1 Crisis (emergency, disaster) management concept

There is no formally approved crisis management concept. A draft document outlining such a concept was discussed at the turn of the century. Those discussions informed the drafting of the *Crisis Management Law*. Many of the stipulations in that law (repealed in 2009) are now included in the *Disaster Protection Act*.

2.2 General crisis (emergency, disaster) management law

In 2005 a *Crisis Management Law* was introduced. However, it was repealed in 2009 without much debate in Parliament or within the expert community. In the authors' opinion, there were two main reasons for that decision. Firstly, it contained a rather broad legal definition of a 'crisis,' potentially subject to various interpretations,⁴⁵⁰ and secondly, the new party in power⁴⁵¹ intended to close down then existing *Ministry on Crisis Management*⁴⁵² and to transfer its functions, along with the Civil Protection Agency, to the Ministry of the Interior.

The main law currently regulating crisis management is the *Disaster Protection Act*.

The Act regulates the protection of life and health of the population, the preservation of the environment and property during disasters.⁴⁵³

This Act provides definition of a disaster,⁴⁵⁴ outlines the responsible authorities and actors, and the coordination of their activities through the Unified Rescue System, the main principles and activities of disaster management (prevention, protection, recovery and assistance, resource allocation, providing and receiving aid), the contribution of citizens, volunteers and legal entities (companies), administrative measures and penalties, and legal definitions of the main terms.

The Disaster Protection Act envisions implementation of certain norms introduced by other laws:

⁴⁵⁰ The Crisis Management Law existed in parallel to the Disaster Protection Act, but was cancelled in 2009 through amendments to the Law on Defence and Armed Forces.

⁴⁵¹ Prior to and after the regular parliamentary elections in the early summer of 2009, the leaders of the party coming to power declared publicly, on several occasions, this intention.

⁴⁵² Earlier, Ministry on Disasters and Catastrophes.

⁴⁵³ Disaster Management Act, Article 1.

⁴⁵⁴ See the opening section of Chapter 1 above.

- According to Article 9(12), the part on “Flooding” of the disaster protection plans is drafted taking into account the plans for managing the risk of flooding, developed according to the requirements of the *Law on Waters*.⁴⁵⁵
- According to Article 9(14), in the initiation or approval of the detailed plans for the territory, required by the Law on Territory Planning,⁴⁵⁶ the bodies responsible for the elaboration of disaster protection plans provide information on foreseen disasters, endangering the territories in the scope of the disaster protection plans, and for the necessary measures for their protection, included in the disaster protection plans.
- Owners and operators of sites and assets in the scope of Article 137, categories 1, 2, or 3 of the Law on Territory Planning (roads and other infrastructure and construction sites of significant importance and involving high complexity and risk) are obliged to develop, maintain and prepare for the implementation of an emergency plan for the respective site/ asset.
- According to Article 18a(2), the information on designating certain infrastructure as European Critical Infrastructure is in accordance with the respective level of classification, defined by the Law on Protecting Classified Information.⁴⁵⁷ According to the same Law and Article 18b(6) of the Disaster Protection Act, the operator’s plan for security of European Critical Infrastructure is considered classified information.

Additional requirements are introduced by other laws and regulations, including the Law on the Forests and Regulation # 8 on the conditions and procedures for protecting forest territories from fires, the Law on Waters and Regulation # 13 maintenance of dams and relevant facilities, the Law on the Safe Use of Nuclear Energy and Regulation on emergency planning and emergency preparedness in case of nuclear and radiation accident, and the Regulation on critical infrastructures. Among the relevant sector-specific laws are also the Law on the Ministry of the Interior, the Law on Defence and Armed Forces, and the Law on State Agency “National Security.” For details refer to section 2.4 below.

2.3 Emergency rule

Declaration of war, military situation or emergency (‘extraordinary’) situation is treated in the Constitution of the Republic of Bulgaria (see above). According to Article 122(1) of the Law of Defence and Armed Forces “emergency (extraordinary) situation” is introduced on the whole or part of the territory of the country “under a danger of involving the Republic of Bulgaria in a military-political crisis or a military conflict.”⁴⁵⁸

The Disaster Protection Act stipulates that in all three cases—war, military situation or emergency (extraordinary) situation—the protection of the population is exercised in accordance with the Geneva Conventions.⁴⁵⁹

The declaration of a disaster [situation] is treated in Chapter 5 of the Disaster Protection Act.

⁴⁵⁵ Law on Waters, *State Gazette* 67 (27 July 1999), last amendment 28 November 2014.

⁴⁵⁶ Law on Territory Planning, *State Gazette* 87 (29 September 1995), last amendment 14 October 2011).

⁴⁵⁷ Classified Information Protection Act, *State Gazette* 45 (30 April 2002), last amendment 28 June 2014.

⁴⁵⁸ Thus clearly distinguishing *emergency (extraordinary)* from a *disaster* situation as a result of a natural or technogenic nature.

⁴⁵⁹ Disaster Protection Act, Article 19(2).

Disaster situation is a mode (regime), introduced in the area of the disaster by the authorities, authorised by law, that involves application of temporary measures aimed to contain the disaster and conduct rescue and urgent recovery works.⁴⁶⁰ A disaster regime is declared after the implementation of the measures of the respective disaster protection plan has been initiated.

The mayor of the municipality with his or her order declares a disaster situation on the territory of the municipality or part of it, and sends a copy of the order to the regional governor and the Minister of the Interior.⁴⁶¹ Likewise, the governor declares a disaster situation on the territory of the region or part of it, and immediately sends a copy of the order to the Minister of the Interior.

The Council of Ministers, on the proposal of the Minister of the Interior, takes and announces a decision to declare a disaster situation on the territory of more than one region or on the territory of the whole country.⁴⁶²

The order (respectively, the decision) declaring a disaster outlines:

- the conditions serving as a basis for declaring a disaster situation;
- the rationale behind the declaration of a disaster situation;
- the borders of the territory on which the disaster situation is declared;
- the measures for containing the disaster, including the measures, temporarily undertaken, on constraining the rights of the citizens;
- the bodies and persons responsible for the implementation of these measures;
- the initial moment of introducing the disaster situation and its duration (which cannot exceed 30 days).⁴⁶³

The Act further defines the conditions under which the disaster situation can be extended or terminated.

Article 52 of the Disaster Protection Act defines rights that can be temporarily limited, in the “inevitably necessary scale” during a disaster:

1. the right of inviolability of persons and homes when people are temporary taken away from areas where their life and health are under immediate danger;
2. the right to use property when it is necessary to protect persons’ life, health and property, or the environment;
3. the freedom of movement or staying in a designated part of the territory, endangered or affected by the disaster;
4. the right to conduct an activity that could hamper or prevent the implementation of rescue works.

When a disaster situation is declared, the necessary measures may include:

1. temporarily moving away persons, pets, and farm animals and removal of property from a designated territory;
2. prohibition of entering, staying or moving in certain sites or territory;
3. immediate construction, engineering works, terrain restructuring, or removal of constructions aimed to mitigate or prevent a threat as a result of the disaster;

⁴⁶⁰ Disaster Protection Act, Article 48(1).

⁴⁶¹ Disaster Protection Act, Article 49.

⁴⁶² Ibid., Articles 49 and 50.

⁴⁶³ Ibid., Article 51(1).

4. care for children and disadvantaged people, if in the disaster situation such care cannot be exercised by the people who usually provide it;
5. supplying with priority kindergartens, social, health and medical institutions and the rescue teams;
6. evacuation and/or de-concentration.

According to Article 52(3) of the Disaster Protection Act, the conditions and procedures for conducting evacuation and de-concentration are defined in a Regulation, approved by the Council of Ministers.⁴⁶⁴

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

A number of laws and regulations treat the disaster protection responsibilities of individual departments and agencies. The key ones among them are the following:

- The Law on Waters and Regulation # 13 of 29 January 2004 on the conditions and procedures for technical maintenance of dams and relevant facilities describe duties and obligations of the Ministry of Environment and Waters, its subordinated executive agencies and basin directorates, as well as owners and operators of dams and related infrastructure.
- The *Law on the Forests* defines requirements towards planning and inspections in order to prevent and protect forests from fires. In addition, Regulation # 8 on the conditions and procedures for protecting forest territories from fires tasks the Executive Director of the Executive Agency “Forestry” to collect the necessary statistical information on fires for all forest territories (and, thus, facilitate risk management).⁴⁶⁵
- The *Law on the Safe Use of Nuclear Energy* defines key conditions for safe exploitation of nuclear power stations and other radiation sources, and the respective obligations of the Nuclear Regulation Agency.
- The *Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them* stipulates responsibilities of owners and operators of critical infrastructures and assets. It also identifies the Minister of the Interior as the point of contact for exchange of information on European Critical Infrastructure.
- The *Law on Health* defines the disaster protection responsibilities of medical and other health institutions (including national and regional health inspections, the Head State Health Inspector and regional health inspectors).⁴⁶⁶
- The *Law on the Ministry of the Interior* defines the provision of fire safety and protection in fires, disasters and emergency situations as one of the seven main activities of the ministry.⁴⁶⁷ This activity is further detailed in Article 17 of the Law. In regard to crisis management, this law refers to the Disaster Protection Act.

⁴⁶⁴ Ordinance on the conditions and procedures for conducting evacuation and de-concentration, State Gazette 103 of 28 December 2012.

⁴⁶⁵ Article 12 /3/ of Regulation # 8 on the conditions and procedures for protecting forest territories from fires.

⁴⁶⁶ Law on Health, section V, Articles 114, 115.

⁴⁶⁷ Law on the Ministry of the Interior, Article 6(1).

- The *Law on Defence and Armed Forces* stipulates that in peacetime the armed forces maintain readiness and provide humanitarian assistance and rescue on the territory of the country and its maritime space, as well as outside the country in accordance with the national legislation and the international treaties. Units of the armed forces are trained to provide rescue and emergency recovery works to contain disasters and overcome their consequences. The armed forces contribute to prevention, protection, rescue and urgent recovery works in accordance with the Disaster Protection Act.⁴⁶⁸
- According to the *Law on State Agency "National Security,"* the Agency conducts activities aimed to protect national strategic sites and activities.⁴⁶⁹

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Each municipality/ region has a disaster protection plan, tailored to its specific circumstances. The first response is local, and it is up to the mayor/ the regional governor to initiate the implementation of the respective disaster protection plan and, if necessary, to declare a disaster situation.

When the locally available capacity is (or deemed to become) overwhelmed, the mayor/ the regional governor request the activation of additional components of the Unified Rescue System and other forces and means.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Chapter 4, section III of the Disaster Protection Act is dedicated to volunteer formations. It defines "volunteer" as a "person participating in a volunteer formation for preventing or containing disasters, fires, and emergency situations and elimination of their consequences"⁴⁷⁰ and the requirements to volunteers in terms of age, health, etc.⁴⁷¹

Volunteer formations are created by the mayor based on a decision of the Municipal Council. The mayor sends a request to the Ministry of the Interior so that the volunteer formation is listed in a central registry.⁴⁷²

As of January 8, 2016, the register lists 170 volunteer formations with 2 474 volunteers in total.⁴⁷³

The mayor is responsible to:

1. sign a contract with the volunteer;⁴⁷⁴
2. provide training and equipment to the volunteer;

⁴⁶⁸ Law on Defence and Armed Forces, Article 56, para 4, 5 and 6.

⁴⁶⁹ Law on State Agency "National Security," Article 4(1)9.

⁴⁷⁰ Disaster Protection Act, Article 39.

⁴⁷¹ Ibid., Article 40.

⁴⁷² Registries of the FSCP General Directorate, www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm.

⁴⁷³ Register of the volunteer formations for disaster protection on the territory of the Republic of Bulgaria and number of volunteers by municipality, 8 January 2016, available at http://www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_08012016g.pdf.

⁴⁷⁴ When the person meets established training requirements.

3. insure the volunteer against accidents as a result of or in connection with his or her contract obligations;
4. insure the volunteer against all relevant social risks.

The respective expenditures are covered by the state through the delegated budget.⁴⁷⁵

2.7 Legal regulations for international engagements of first responders and crisis managers

The Disaster Protection Act envisions delivering and receiving aid during disasters, as well as certain forms of international cooperation, but does not treat Bulgaria's contribution to international rescue and/or humanitarian operations.

The Regulation on the structure and the activity of the Ministry of the Interior adds the participation in international humanitarian and/or rescue operations to the rescue activities performed according to the Law on the MOI.⁴⁷⁶ Other articles in this document refer to participation in international fire-fighting operations, operational cooperation with the EU, NATO and other international organisations in the fields of fire safety, protection of the population, humanitarian assistance and civil-military emergency planning.⁴⁷⁷

Roles, command arrangement, and rules of engagement are not explicitly treated in laws and regulations. Most likely, the working assumption is that Bulgaria will contribute to international operations, for example organised within the EU civil protection mechanism or led by NATO, with relatively small units and teams.

Often, Bulgaria contributes to first response of humanitarian relief operations with military units or personnel. Armed forces' personnel and equipment sent to missions abroad are insured against several types of risks.⁴⁷⁸

⁴⁷⁵ Disaster Protection Act, Article 42(2).

⁴⁷⁶ The Regulation on the structure and the activity of the Ministry of the Interior, Article 66, para 8.

⁴⁷⁷ Ibid. articles 65 and 69.

⁴⁷⁸ For details see the tender announcement by the MOD for insuring personnel equipment outside the territory of Bulgaria at http://www.aop.bg/case2.php?mode=show_doc&doc_id=606574&newver=2 (in Bulgarian).

3 Organisation

3.1 Organisational chart

Brief overview of the evolving organisational arrangements

Natural disasters in Bulgaria are on the increase. From June to October 2014, on five different occasions heavy floods affected half of Bulgaria's regions and took 18 casualties. By the end of October, the total number of disasters since the start of the year exceeded 600, including train crashes and explosions in ammunition factories, the most recent one killing 15 people.

These types of challenges faced come in sharp contrast with the traditional concerns and the approach to civil protection. In 1936, Decree no. 310 of Tsar Boris III introduced the *Regulation for air defence and chemical protection of the population*, with respective tasks for the armed forces and other governmental agencies. The focus on protecting the population in times of military conflict against WMD was reaffirmed in the time of the Cold war, 1946-1989. Renamed to "Central Directorate of Civil Defence" in 1962, the organisation was directly subordinated to the Council of Ministers. In 1971, the "Civil Defence" organisation became part of the Ministry of Defence (MOD), with the additional tasks of *preventing and limiting the consequences of natural disasters and major industrial catastrophes*. With Governmental Ordinance no. 419 of 4 December 1991 the organisation was renamed to "Civil Protection," but retained its military nature as part of the MOD. It was demilitarised in 2000, and in 2001 became *State Agency for Civil Protection* under the Council of Ministers. In 2007 it became part of the newly established Ministry for Disasters and Catastrophes (later renamed as "Ministry of the Emergency Situations," or MES). In 2009 it was included in the Ministry of the Interior (MOI; MES was closed down) as a separate General Directorate, and since 2010 it is part of the MOI General Directorate "Fire Safety and Civil Protection" (FSCP).

FSCP is the focal point of a multi-agency, multi-stakeholder, territorially distributed system aiming to provide disaster prevention and response.

National authority for disaster management; Chain of command and high-level decision-making

Figure 65 aims to clarify the responsibilities of various executive and consultative bodies with "crisis" management responsibilities.

As a Head of State and a Supreme Commander of the Armed Forces, the President leads the Supreme Command and chairs the Consultative Council on National Security.⁴⁷⁹ According to the Law on the Consultative Council on National Security, it consists of the Chair of the National Assembly (Speaker of the Parliament), the Prime Minister, the ministers of defence, foreign affairs, interior, and finance, the Head of the State Agency "National Security," the Chief of Defence, and one representative of each parliamentary group. Others may be invited to take part in the meetings of the Council depending on the issues to be discussed.⁴⁸⁰

⁴⁷⁹ Constitution of the Republic of Bulgaria, Article 100.

⁴⁸⁰ Law on the Consultative Council on National Security, Article 2.

The Security Council is another consultative body, supporting the Council of Ministers on issues of national security. It is chaired by the Prime Minister, and Deputy Chair is the Vice Prime minister with the relevant portfolio. Permanent members are the ministers of foreign affairs, defence, and interior, the deputy minister of finance, the MOI Main Secretary and the Chief of Defence.⁴⁸¹ The President may participate personally in the meetings of the Security Council and to designate one or more persons to represent him/her.⁴⁸² In practice, the focus of the Security Council is on external threats and the threat of terrorism like and, respectively, on coordinating the work of defence, security and intelligence services.

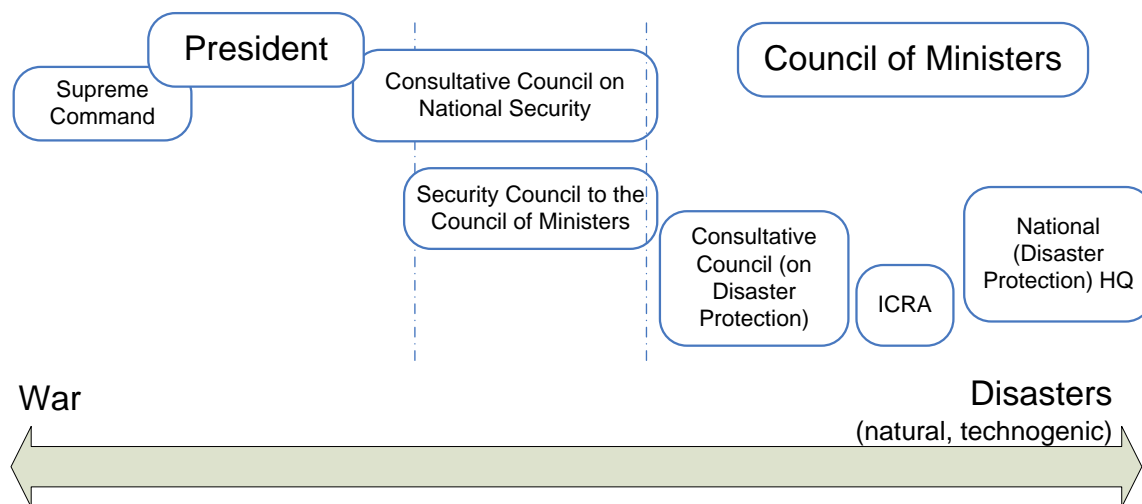


Figure 65: High-level crisis management arrangements.

The lead authority depends on the type of crisis (see Figure 65). In the case of a crisis of natural or technogenic nature, the responsibility is clearly assigned to the Council of Ministers,⁴⁸³ with the Minister of Interior in the lead of main operational preparedness and response activities.

The Council of Minister elaborates the state disaster protection *policy*.⁴⁸⁴ On policy issues, including resource allocation, it is supported by a number of multi-stakeholder formats, as outlined below:

- Policy making is supported by a *Consultative Council*, that includes representatives of ministries, agencies, the Bulgarian Academy of Sciences, universities, research institutes, the National Association of Municipalities, and other legal entities with disaster protection responsibilities⁴⁸⁵ (The MOI FSCP General Directorate has invited the Bulgarian Academy of Sciences (an organisation with 42 research institutes) and 20 universities to nominate their representatives as members of this Consultative Council⁴⁸⁶).

⁴⁸¹ Regulation on the functions, tasks and organization of the work of the Security Council to the Council of Ministers, Article 3.

⁴⁸² Ibid., Article 4.

⁴⁸³ Disaster Protection Act, Article 62.

⁴⁸⁴ Disaster Protection Act, Article 62(1).

⁴⁸⁵ Disaster Protection Act, Article 62(3) and (4).

⁴⁸⁶ Interview with a senior leader from the Bulgarian Academy of Sciences.

- The National Programme for Disaster Protection is developed by the Minister of the Interior, jointly with other ministries and agencies, the National Association of Municipalities, and the Bulgarian Red Cross.⁴⁸⁷
- The Interagency Commission for Recovery and Assistance (ICRA) to the Council of Ministers is led by the Minister of the Interior and includes respective minister or deputy ministers and agency heads, and provides for contributions of the National Association of Municipalities and regional governors.⁴⁸⁸ ICRA decides, among others, on financing or reimbursing urgent rescue and recovery activities and the investments from the central state budget in preventive measures.

The operational disaster response is coordinated through the Unified Response System, with a National Headquarters (HQ), described in the following section.

National permanent disaster management units

The main executive disaster management organisation is “Fire Safety and Civil Protection” (FSCP), constituted as a General Directorate in the Ministry of the Interior (the FSCP structure is presented on Figure 66).

⁴⁸⁷ Disaster Protection Act, Article 18(5).

⁴⁸⁸ Disaster Protection Act, Article 54.

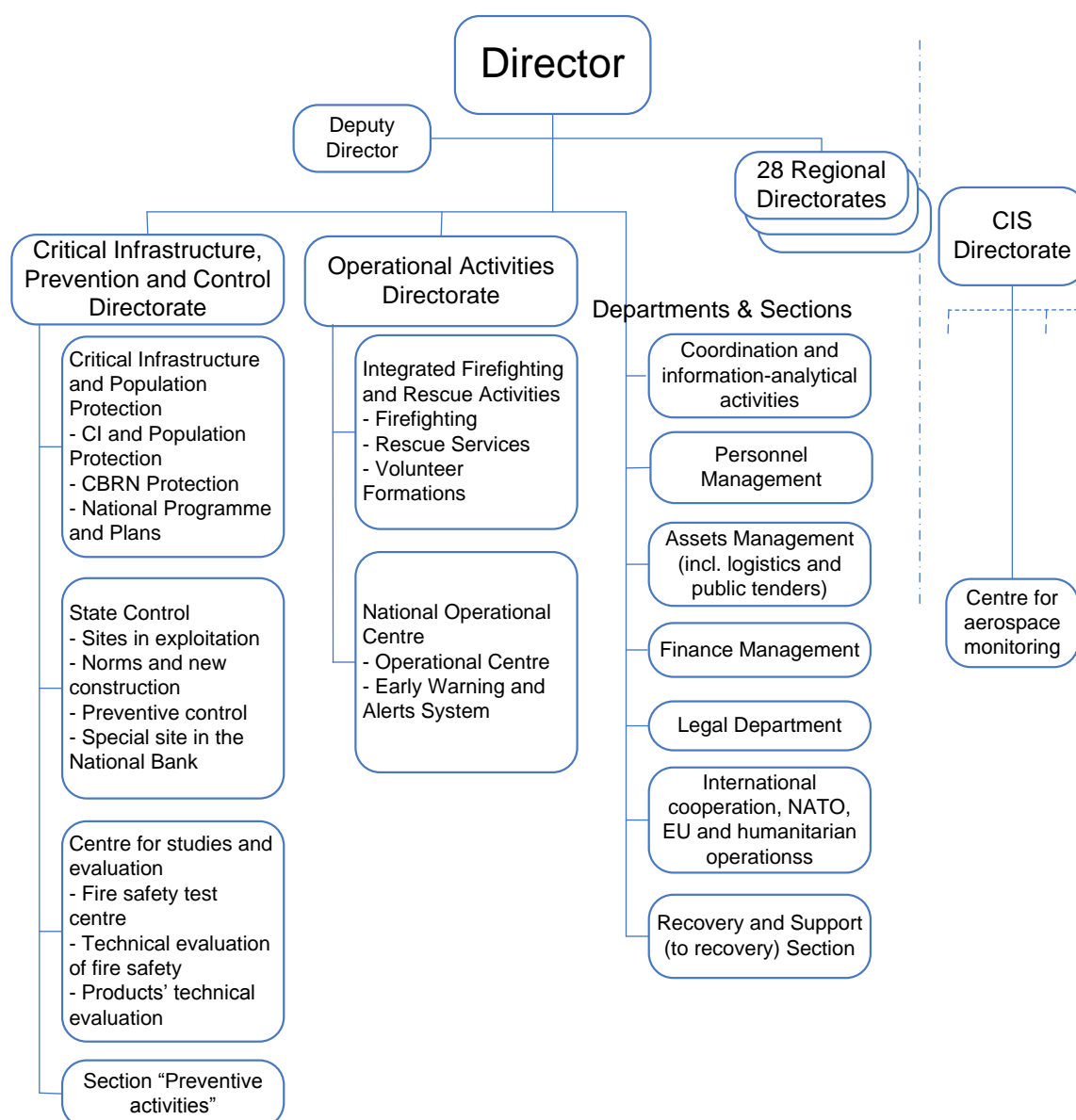


Figure 66: MOI General Directorate “Fire Safety and Civil Protection.”

FSCP includes two directorates, several stand-alone departments and sections, including the national operational centre and the early warning and alert system. Closely related to the FSCP is the Centre for Aerospace Monitoring, supported by the MOI Communications and Information Systems (CIS) directorate.⁴⁸⁹

The FSCP General Directorate includes 28 regional FSCP directorates – one in each region of the country. They have some common administrative elements, but the first responder units are tailored to the disasters typical for the respective regions.

The maximum authorised personnel strength of FSCP is 8 848; it currently employs around 8 000.⁴⁹⁰

According to the 2012 FSCP Modernisation Programme,⁴⁹¹ the FSCP Table of Organisation and Equipment (TOE) calls for 201 rescue vehicles (183 available, including 119 rescue, 41 chemical, 14 alpine,

⁴⁸⁹ The 112 system is supported by another directorate of the Ministry of the Interior.

⁴⁹⁰ Reference on the personnel positions and unfilled positions in the Ministry of the Interior as of 31 May 2014.

9 for divers), 17 lifting gear, 17 medical vehicles, 399 support vehicles, 49 engineering vehicles, 43 armoured vehicles, and 489 transport vehicles. The document itself states that a significant number of this equipment is not in a functional state.

Anticipated use of specialised military assets

The involvement of military capabilities and assets is formally seen as a last resort, envisaged only in cases when the available civilian capacity is overwhelmed. In practice, however, the military are called to support disaster response fairly often, e.g. for aerial surveillance and reconnaissance, search and rescue from the air (see for example Figure 67⁴⁹²), firefighting with specially equipped helicopters and land units, provision of heavy transport vehicles in snow storms and heavy icing, etc.



Figure 67: Military aerial search and rescue during the floods in September 2014.

Annual national plans provide further details. For example, the 2013 plan provides information on the financing necessary to fully equip units and formations of the armed forces for:⁴⁹³

- management of the consequences of an accident at Kozloduy NPP;
- response to industrial accidents;
- response to fires;
- response to floods;
- response to earthquakes;
- activities in heavy winter conditions;
- identifying and destroying unexploded ordnance;
- a rapid reaction military medical team of the Military Medical Academy.

⁴⁹¹ Programme for modernisation and provision of technical resources of the territorial units for fire safety and protection of the population in the Republic of Bulgaria, 2012.

⁴⁹² Servicemen from the Bulgarian Army provide help in areas affected by floods, *MOD News section*, Available at www.mod.bg/bg/news_archive.php?fn_month=9&fn_year=2014#!pP (accessed 12 December 2014).

⁴⁹³ The 2013 Plan for Implementation of National Disaster Protection Programme, p. 32.

The Ministry of Defence, as well as other ministries maintain operational centres and specific crisis response capabilities.

The 2013 National Disaster Protection Plan provides details on the capabilities maintained by the Ministry of Defence and the Armed Forces:⁴⁹⁴

- The “Operations and Training” Directorate is the MOD structure organising the activities of the defence establishment aimed at protecting the population in disasters;
- The Military Medical Academy and its subordinate military hospitals maintain specialised teams, transport vehicles and consulting rooms as follows:
 - a Rapid Reaction Military Medical Team (RRMMT) – Sofia with 15 specialised teams (4 – surgery; 2 – resuscitation; 2 – therapeutic; 1 – toxicological; 1 – obstetrics-gynaecological; 1 – epidemiological; 2 – for infectious diseases; 2 – resuscitation teams for aerial medical evacuation⁴⁹⁵); the respective specialised transport vehicles (4 ambulances; 1 mobile treatment cabinet /therapeutic room/; 1 mobile paediatric room; 1 mobile obstetrics-gynaecological room; 1 mobile surgery room; 1 mobile resuscitation room; 1 mobile dressing vehicle; 1 bus for sanitary evacuation);
 - RRMMT-Plovdiv, Varna, and Pleven each maintain 3 teams (surgery; resuscitation; therapeutic) with the respective specialised vehicles;
- “Military Police” maintains a team of 76 military staff and 28 vehicles in readiness to perform protection, traffic management, and escort;
- With a staff of 355, Executive Agency “Military Clubs and Recreation” maintain 2 800 beds and can host affected groups of the population;
- The Bulgarian Army maintains 95 formations available for containing and overcoming the consequences of disasters, as follows:
 - for managing the consequences of an accident at Kozloduy NPP – 6;
 - for managing the consequences of industrial accidents – 7;
 - for extinguishing fires – 20;
 - for managing the consequences of earthquakes – 9;
 - for activities in heavy winter conditions – 23;
 - for identifying and destroying unexploded ordnance – 16.

Other national organisations with crisis management responsibilities

Numerous executive, research, and non-governmental organisations, in addition to the Ministry of the Interior, have disaster protection responsibilities. The National Disaster Protection Programme 2014-2018 lists in particular the responsibilities of:

- The Ministry of Foreign Affairs
- The Ministry of Regional Development
- The Ministry of Health
- The Ministry of Defence
- The Ministry of Transport, Information Technologies, and Communications
- The Ministry of Economy and Energy
- The Ministry of Environment and Waters

⁴⁹⁴ The 2013 Plan for Implementation of National Disaster Protection Programme, pp. 6-7.

⁴⁹⁵ When air transport is provided by other military units or companies.

- The Ministry of Labour and Social Policy
- The Ministry of Agriculture and Foods
- The Ministry of Culture
- The Ministry of Education and Science
- State Agency “State Reserves and Wartime Stocks”
- The Bulgarian Red Cross
- The Nuclear Regulation Agency
- The Research Institute on Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences
- National Institute of Meteorology and Hydrology at the Bulgarian Academy of Sciences.

Most of these ministries and agencies maintain general purpose or specialised disaster protection units, described in respective annexes to the National Disaster Protection Plan.

Local emergency management arrangements

The regional governor and the mayor are the lead authorities respectively at regional and municipal level, supported by the head of the local FSCP unit.

Regional administrations, as well as the administration of big municipalities, have “Security Directorates” with the functions, *inter alia*, to protect the population in “disasters, accidents, incidents, and other emergency situations,” planning and coordination of disaster protection, budgeting the creation of stocks of individual protection means, PR activities related to disaster protection, creating and equipping one or more volunteer formations, etc.⁴⁹⁶

Smaller municipalities maintain sections or individual employees with disaster protection responsibilities.

Volunteers and volunteer organisations; specialised NGOs

Since 2011, the Disaster Protection Act regulates the contribution of volunteers and the functioning of volunteer formations.⁴⁹⁷ The amendment to the Act was followed by the adoption of a *Strategy for developing volunteer formations for protection in disasters, fires, and other emergency situations in Republic of Bulgaria 2012-2020*.⁴⁹⁸

According to Article 47 of the Disaster Protection Act, the FSCP General Directorate maintains a registry of such volunteer formations. By October 2015 the registry lists 169 units at municipal level, with 2470 volunteers, is available at the FSCP page on the MOI website⁴⁹⁹ (compared to 162 units with 2311 volunteers in December 2014).

⁴⁹⁶ See, for example, “Security Directorate,” General Administration, Mayor of the Sofia Municipality, available in Bulgarian at www.sofia.bg/tu1.asp?napr=1574 (accessed 5 December 2014).

⁴⁹⁷ Disaster Protection Act, Articles 39-47.

⁴⁹⁸ Available at http://www.nspbzn.mvr.bg/NR/ronlyres/07BFA9E-CBA4-4C10-91F0-ACC720FFAE57/0/01_STRATEGIYA_DF_15_10_2012.pdf, in Bulgarian.

⁴⁹⁹ Available in Bulgarian at http://www.nspbzn.mvr.bg/NR/ronlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_23102015g.pdf.

The Bulgarian Red Cross⁵⁰⁰ is the foremost non-governmental organisation with disaster protection capabilities and key node in a network of specialised organisations:

- Bulgarian Red Cross Youth, <http://youth.redcross.bg>
- Mountain Rescue Service, www.pss.bg
- Water Life Saving Service, <http://en.redcross.bg/activities/activities3.html>
- Refugee-Migrant Service, <http://en.redcross.bg/activities/activities8.html>.

The list of relevant NGOs and associations includes also:

- National Association of the Volunteers in the Republic of Bulgaria⁵⁰¹
- National Syndicate of Firefighters and Rescue Workers “Firefighter.” The syndicate has 92 sections at city/municipal level
- Association “Club Active Security,” www.aktivnasigurnost.org/en/home
- Humanitarian NGOs, such as Caritas, <http://caritas.bg>
- NGOs dedicated to environmental protection, such as WWF, www.wwf.bg.

Private businesses and public-private partnerships

The Disaster Protection Act provides for the involvement in legal entities, including private commercial companies, in disaster prevention, preparedness and response activities. Three types of companies are treated explicitly in the law:

- owners/ operators of critical infrastructure, especially of assets designated as European critical infrastructure;
- operators of radio and television programmes;
- providers of electronic communications.

In addition, according to a general clause in the Disaster Protection Act, all legal entities and trade companies registered as physical persons, that are included in a disaster protection plans, are obliged to provide the planned assistance upon request.⁵⁰²

During the floods of 2014, private enthusiasts demonstrated the aerial surveillance capabilities of both ultralight piloted aircraft and remotely piloted aerial vehicles.

Attempts have been made to establish public-private partnerships aiming to provide helicopters for rescue and transportation of injured and other people in need to major hospitals.⁵⁰³

3.2 Organisational cooperation

Operational cooperation

Although FSCP is the organisation with most responsibilities for disaster management and protection of the population, it is not expected to provide disaster protection all by itself. All activities for protection of the population in a disaster (or a pending disaster) are performed by the Unified Rescue

⁵⁰⁰ Bulgarian Red Cross, <http://en.redcross.bg>.

⁵⁰¹ Established at the end of August 2014; the official registration is still pending.

⁵⁰² Disaster Protection Act, Article 37.

⁵⁰³ See for example “The Ministry of Health will pursue a public-private partnership for the sanitary aviation,” available in Bulgarian at www.investor.bg/ikonomika-i-politika/332/a/mz-shte-tyrsi-publichno-chastno-partniorstvo-za-sanitarnata-aviaciia-166328 (accessed 5 December 2014).

System, which incorporates structures of ministries and agencies, municipalities, trade companies, hospitals and other health centres.⁵⁰⁴

The underlying principle is that the response is local and, when necessary, it is enhanced by provision of additional capabilities and assets. The request for assistance is processed through the URS.

The main URS components are:

- General Directorate “Fire Safety and Civil Protection” of the Ministry of the Interior;
- The MOI regional Directorates;
- The Centres for Emergency Medical Care.⁵⁰⁵

Figure 68 presents the information flows in operational coordination in crisis management and disaster response. With slight variations, such visualisation is included in annexes to the 2010 National Disaster Protection Plan⁵⁰⁶ describing the coordination of the URS components in the following scenarios:⁵⁰⁷

- Annex # 67 – in case of an earthquake;
- Annex # 68 – in cases of floods;
- Annex # 69 – in cases of industrial accidents involving release of dangerous substances;
- Annex # 70 – in large and complex forest fires;
- Annex # 71 – in cases of heavy snowfalls, snowstorms, and icing;
- Annex # 72 – in the case of road, railroad, and aviation catastrophes;
- Annex # 73 – disasters and accidents as results of a terrorist act.

There is a National HQ for cases of disasters. The National HQ is created by an order of the Prime Minister along with the introduction of the National Plan for Disaster Protection. This order lists the names of the members of the National HQ – ministers, deputy ministers, agency heads and their deputies, and other representatives of organisations with responsibilities envisioned in the National Plan for Disaster Protection.⁵⁰⁸

The activity of the National HQ is supported in terms of logistics, communications and administrative matters by the FSCP General Directorate and, depending on the type of disaster, by other competent ministries, agencies, or institutions. It is supported also by thematic working groups and an “infor-

⁵⁰⁴ Disaster Protection Act, Article 20. All these structure preserve their institutional or organisational affiliation, roles and functions.

⁵⁰⁵ Disaster Protection Act, Article 22(1).

⁵⁰⁶ The currently standing plan.

⁵⁰⁷ Operational coordination in radiation accidents, epidemics, and epizootics is organised in specific ways.

⁵⁰⁸ Disaster Protection Act, Article 62a(2).

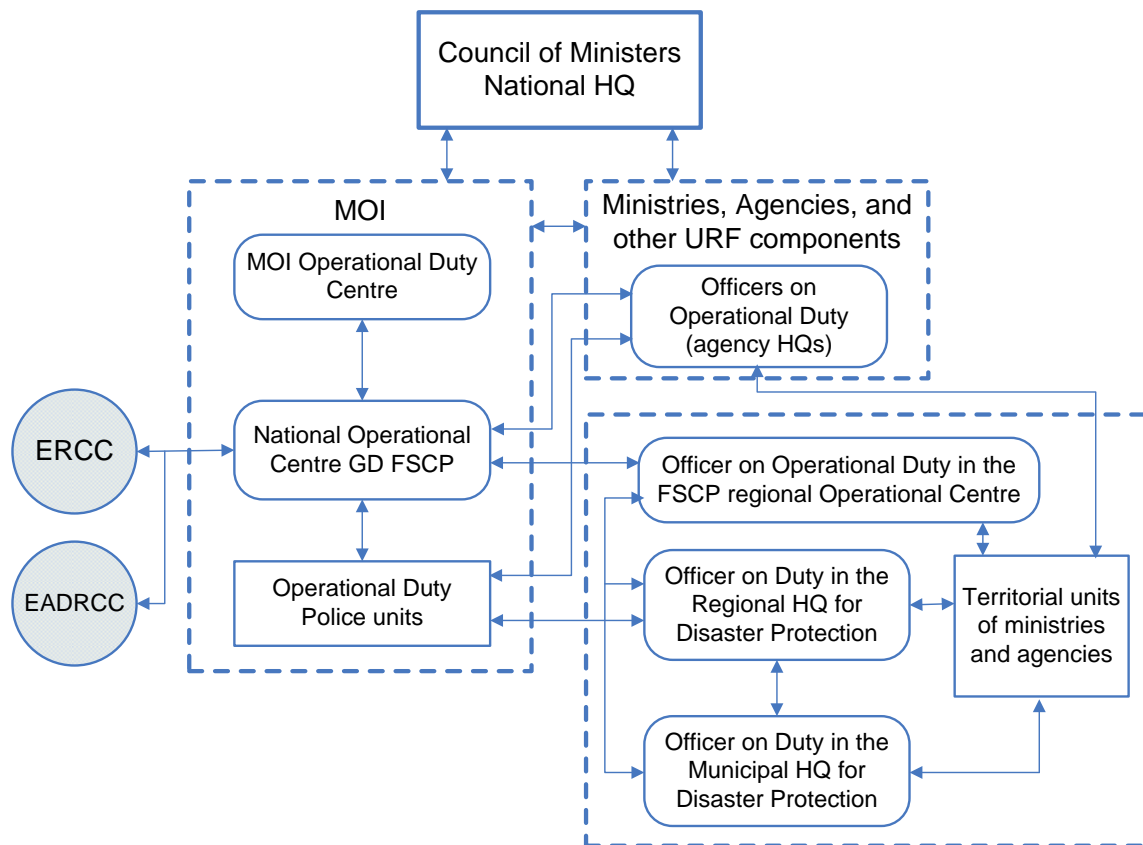


Figure 68: Operational Coordination in Crisis Management and Disaster Response.

mation working group.” All respective members are included on “alert lists,” maintained within the national early warning and alert system.

The National HQ conducts the following activities:⁵⁰⁹

1. Analysis and assessment of the disaster situation;
2. Decision making on the necessary quantities and resource allocation to rescue and urgent recovery works for prevention, containment and overcoming the consequences and assisting the affected population;
3. Organisation and coordination of the actions of ministers, agency heads, regional governors, mayor of municipalities, and legal entities (companies) with responsibilities for disaster protection;
4. Exercises control of the implementation of the tasks and the measures for containing the disaster;
5. Through the media, informs the population for the evolution of the disaster, for the measures for its mitigation and containment, and for the necessary precautions;
6. Reports to the Prime Minister, the President of the Republic of Bulgaria, and the speaker of Parliament for the ways in which protective activities are conducted.

There is no formal mechanism for assigning priorities in case of two or more events occurring simultaneously. It could be inferred that the guiding principles are:

⁵⁰⁹ Disaster Protection Act, article 62a(6).

1. to provide protection of the life and health of the population, the environment and the property (as Article 1 of the Disaster Protection Act defines its purpose); and
2. giving a priority (advantage) to saving human life among all protection activities.

Hence, the expectation is that, in case of simultaneous disasters, the available resources and capabilities will be managed in a way that minimises human casualties.

International cooperation in responding to a disaster is managed via the National Operational Centre at FSCP (the national point of contact in disasters with the EU, NATO and other international organisations⁵¹⁰; see Figure 68). That includes:

- cross-border collaboration on a bi-lateral or another regional basis;
- cooperation with the EU via the Emergency Response Coordination Centre (ERCC);
- cooperation with NATO via the Euro-Atlantic Disaster Response Coordination Centre (EADRCC).

In national disaster situations, the FSCP Operational Centre notifies DG ECHO and EADRCC according to approved standard operating procedures and using approved notification forms.⁵¹¹ The request briefly describes the situation and the impact of the disaster.

In a nuclear or radiation accident, the Nuclear Regulatory Agency notifies the International Atomic Energy Agency (IAEA) and the European Union through the system ECURIE, as well as the regulatory bodies of the countries with which Bulgaria has signed bi-lateral notification agreement. The regulatory bodies of other countries that could be affected by the accident are also notified.

A request for assistance to the EU is sent by the FSCP Operational Centre to ERCC via the CECIS network. Approved forms are used to describe both a request and a proposal to provide assistance.⁵¹²

A particularly detailed procedure is in place for requesting from the EU (within its Civil Protection mechanisms) or another state a module for fighting forest fires through aerial means.⁵¹³

In the framework of NATO, requests for assistance are sent to EADRCC via Internet, fax and/or phone. Approved forms are used to describe both a request and a proposal to provide assistance.⁵¹⁴

In a nuclear or radiation accident the request for or the provision of assistance follow the procedures described in the *External Plan for Accidents in Kozloduy NPP*.

During the disaster, the FSCP Operational Centre regularly sends brief situational reports to ERCC and EADRCC, describing the status and the evolution of the situation, using approved forms.⁵¹⁵

Requests for disaster assistance from countries that are not members of the European Union or NATO are sent through Bulgaria's Ministry of Foreign Affairs, by verbal notes through Bulgaria's embassies in the respective countries, or through their diplomatic missions in Bulgaria.

Cooperation and coordination in CM capability development

The coordinated use of resources within an individual ministry or agency towards crisis preparedness and response is usually guaranteed. The requirements of the EU civil protection mechanism and the

⁵¹⁰ National Disaster Protection Plan 2010, section 6.2, pp. 24-25.

⁵¹¹ Annexes 13 and 14 of the National Disaster Protection Plan 2010.

⁵¹² Annexes 15 and 16 of the National Disaster Protection Plan 2010.

⁵¹³ Annex 12 of the National Disaster Protection Plan 2010, pp. 142-159.

⁵¹⁴ Annexes 17 and 18 of the National Disaster Protection Plan 2010.

⁵¹⁵ Annexes 19 and 20 of the National Disaster Protection Plan 2010.

development of a European Emergency Response Capacity (EERC) are of particular importance,⁵¹⁶ and thus facilitate the coordinated use of resources.

Also, section 7 of the National Disaster Protection Plan details the responsibilities of officials (i.e. ministers, agency heads, regional governors, mayors) in terms of disaster protection, including their coordination roles.⁵¹⁷

There are some legally defined priorities. Among the protection measures, the Disaster Protection Act declares that prevention has a priority.⁵¹⁸ However, the examination of the distribution of the budget managed by the Interagency Commission on Recovery and Assistance (ICRA) shows that in the last two years, i.e. since the earthquake in Pernik, practically no funding has been provided by ICRA for preventive activities. The Law defines the measures for protection of critical infrastructures also as a priority.⁵¹⁹

The five-year national disaster protection programme defines other priorities for the development and resource allocation to the Unified Rescue System.⁵²⁰

However, crisis management capability planning has not been introduced, with the possible exception of the planning within the defence ministry.

There is no nationally centralized process of capability planning. There is a process of centralised planning in place for the development of the national disaster protection programme and the annual plans for its implementation, but it lacks major features of the planning for capabilities.⁵²¹ For example, it does not seek most efficient national solutions, while the planning of the state budget strictly follows organisational boundaries and tends to preserve institutional stovepipes.

Nevertheless, Bulgaria's executive authorities are gaining some knowledge on the planning principles and processes, primarily through the participation in multi-national, EU-funded projects. Examples of international cooperation in the development of capabilities, related to crisis management, are provided in Chapter 5 of this report.

⁵¹⁶ Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.

⁵¹⁷ National Disaster Protection Plan 2010, pp. 26-40.

⁵¹⁸ Disaster Protection Act, Article 4, para 4.

⁵¹⁹ Disaster Protection Act, Article 8a(3).

⁵²⁰ Disaster Protection Act, Article 18(2), para 5.

⁵²¹ See, for example, Todor Tagarev, "Capabilities-Based Planning for Security Sector Transformation," *Information & Security: An International Journal* 24 (2009): 27-35, <http://dx.doi.org/10.11610/isij.2404>.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The publicly available National Disaster Protection Plan (NDPP) includes descriptions of standard operating procedures (SOPs) for a number of disaster scenarios. The SOPs, which are listed below, prescribe the way the activities of URS components are coordinated:

- SOP # 01, in case of earthquakes (Annex # 67 to NDPP);
- SOP # 02, in case of flooding (Annex # 68 to NDPP)
- SOP # 03, in case of nuclear and radiation accidents (Annex # 51 to Complement 3 to NDPP)
- SOP # 04, in large and complex forest fires (Annex # 70 to NDPP)
- SOP # 05, in case of heavy snowfalls, snowstorms, and icing (Annex # 71 to NDPP)
- SOP # 06, in case of industrial accidents involving release of dangerous substances (Annex # 69 to NDPP)
- SOP # 07, in the case of road, railroad, and aviation catastrophes (Annex # 72 to NDPP)
- SOP # 08, in disasters and accidents as a result of a terrorist act (Annex # 73 to NDPP).

As part of the National Disaster Protection Plan, each SOP is publicly available, and typically includes:

1. Purpose and normative basis;
2. Area of application of the procedure;
3. Alerting by the URS and the management bodies;
4. Organisation of the interaction among the operational duty centres of the Unified Rescue System (see as an example the information flows on Figure 68);
5. Designation of the coordinating authority on the site of the disaster and its responsibilities;
6. Responsibilities of the URS components involved in disaster management (in terms of alerting, implementation of urgent measures, rescue operations, evacuation /if applicable/, urgent recovery works, other operations);
7. Points of 24/7 contacts for implementation of the procedure;
8. Conditions for terminating the application of the procedure.

All stakeholders are aware of the SOPs. Procedures are considered to be understood and accepted by contributing parties.⁵²² Disaster management exercises are used to test, among others, the standard operating procedures.

4.2 Operations planning

As it is mentioned above, Bulgaria has in place a standing National Disaster Protection Plan. The current version was approved in 2010, and has three major supplements:

- Supplement 1, issued in 2012, is dedicated to the protection during earthquakes;
- Supplement 2, also issued in 2012, treats the protection during floods;

⁵²² Interview with a senior leader from FSCP.

- Supplement 3 is the External plan for accidents in Kozloduy NPP, issued in 2012 and amended in July 2014.

The minister of the interior develops the National Disaster Protection Plan (NDPP) jointly with representatives of other ministries, agencies, the Bulgarian Red Cross, and local authorities.⁵²³ The NDPP is adopted by the Council of Ministers.⁵²⁴

Ministers and agency heads develop disaster protection plans aimed at implementing their obligations in accordance with the National Disaster Protection Plan. These plans are authorised by the respective minister or agency head, after being countersigned by the Minister of the Interior.⁵²⁵

The regional governor organises the development of a disaster protection plan for the region, jointly with the local structures of the central executive power and the mayors of municipalities. The regional disaster protection plan is authorised by the governor, after being countersigned by the Minister of the Interior.⁵²⁶

The mayor develops a disaster protection plan for the municipality, jointly with representatives of agencies and legal entities (e.g. companies) relevant for disaster protection on the territory of the municipality. The municipal disaster protection plan is adopted by the Municipal Council.⁵²⁷

The operational planning process follows a practically established procedure. It is not clear to what extent it follows international best practice and standards.

In the last two years a number of relevant international standards have been adopted as national standards, including:

- ISO 22320:2011 "Societal security -- Emergency management -- Requirements for incident response";
- ISO 22301:2012 "Societal security -- Business continuity management systems -- Requirements";
- ISO 22313:2012 "Societal security -- Business continuity management systems -- Guidance."

In the future, these standards may be implemented by first responders and other organisations with crisis management responsibilities.

4.3 Logistics support in crises

According to the Disaster Protection Act, legal entities, including commercial companies "are obliged to deliver upon request the planned assistance"⁵²⁸ and to plan and protect the personnel and the facilities they own or operate.⁵²⁹ In practice, private companies are requested to provide logistics services, which they do on an ad-hoc basis, and are reimbursed at a later stage.

The Ministry of Defence plans to provide accommodation to people, affected by a disaster, through the Executive Agency "Military Clubs and Recreation." There have been cases with the floods in 2014

⁵²³ Disaster Protection Act, Article 9(4).

⁵²⁴ Ibid., Article 9(5).

⁵²⁵ Ibid., Article 9 (6) and (7).

⁵²⁶ Ibid., Article 9 (8) and (9).

⁵²⁷ Ibid., Article 9 (10) and (11).

⁵²⁸ Disaster Protection Act, Article 37.

⁵²⁹ Ibid., Articles 35 and 36.

when the armed forces were providing hot food to affected population in the field. The MOD can provide also transportation and other logistics services on an ad-hoc basis.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Establishing and maintaining systems for monitoring, early warning and alerts is seen as one of the main disaster prevention measures.⁵³⁰ Monitoring, early warning and alerts are based on information provided by citizens, organisations and institutions, including information provided through the 112 National system for emergency calls, as well as on information and data provided by technical monitoring systems (meteorological, hydrological, seismological, chemical, biological, radiological, nuclear, ecological, etc.) and the international exchange of information and data.⁵³¹

Each disaster protection plan describes the procedure for early warning and alerts to the executive bodies, the component parts of the Unified Rescue System, and the population.⁵³²

Alerting the relevant officials, organisations, and the population is the core activity of the Unified Rescue System, performed through the operational centres of the FSCP General Directorate.⁵³³ The owners or operators of critical infrastructure establish and maintain local alert systems.

The law mandates also the establishment of a National System for Early Warning and Alerts (NSEWA) of the executive bodies and the population in disasters.⁵³⁴ The conditions and procedures for the functioning of the NSEWA in disasters and air threats are regulated by the Council of Ministers.⁵³⁵

NSEWA has two component parts for early warning and alerting respectively:

- the executive bodies and the URS components;
- the population.

NSEWA provides information and coordination at national, regional and municipal levels through two national control nodes (main and alternative ones) of the national operational centre of FSCP, regional control nodes and municipal control boards, as well as integrated local alert systems in critical sites and facilities.

NSEWA uses the Unified Communications System of the state administration, the communications networks and services of the MOI (MOI-owned or outsourced) and the frequency spectrum allotted to the Ministry of the Interior.

Early warnings and alerts are issued upon the decision of:

- the Prime Minister, the Minister of the Interior or the MOI Main Secretary – at national level;
- the regional governor and/or the mayor, on the proposal of the director of the FSCP General Directorate of the director of the FSCP regional directorate – at regional and municipal level.⁵³⁶

⁵³⁰ Disaster Protection Act, Article 6(1), para 8.

⁵³¹ Ibid., Article 11. For the technical systems in use see section 5 below.

⁵³² Ibid., Article 9(3), para 7.

⁵³³ Ibid., Article 29(2), para 3.

⁵³⁴ Ibid., Article 62(2), para 5.

⁵³⁵ Regulations of the conditions and procedures for the functioning of the National System for Early Warning and Alerts to the executive bodies and the population in disasters and air threats.

⁵³⁶ Ibid., Article 7(1).

In addition to warnings and alerts, NSEWA provides opportunities for urgent or planned conference calls with executive bodies and URS components.

The Regulation on NSEWA defines also the conditions for issuing alerts, the groups of officials to be alerted and the order of priority for alerting them, etc.

Acoustic signals and preliminary recorded voice messages are used to warn or alert the population on a pending or occurring disaster. Follow-up live voice messages provide information on the nature and parameters of the disaster and guidance on the behaviour and actions of the population.

In a pending or occurring disaster encompassing the whole or part of the territory of a region, early warning and alerts are issued upon the decision of the governor or the director of the FSCP regional directorate, while the mayor or the officer on duty may trigger the alerts for the municipality.

A distinct acoustic signal and voice messages are issued to note the end of the threat of a disaster.

The FSCP webpage at the MOD website provides detailed description of the signals and what they mean.⁵³⁷

Different NSEWA signals and voice messages are tested once or twice a year, and the population is informed by popular media on the forthcoming tests.

Media is also used to disseminate warning and alerts. The officials who have decided on issuing early warning and alerts provide written information to the electronic media on the danger of or the occurring disaster. The media air this information immediately, free of charge, and without alteration with as many repetitions as necessary.

Currently, it is not envisioned to use commercial GSM communications of social networks to issue warnings or alerts to the population.

⁵³⁷ See www.nspbzn.mvr.bg/Pravila_povedenie/signalni.htm/

5 Capabilities

5.1 Human resources

Permanent emergency and disaster management personnel

The main executive disaster management organisation—the MOI General Directorate “Fire Safety and Civil Protection” (FSCP)—has an authorised personnel strength of 8 848, of which about 90 percent, or 8 000 are currently employed.

The FSCP General Directorate includes 28 regional FSCP directorates – one in each region of the country. They have some common administrative elements, while the first responder units are structured with account of disasters typical for the respective regions.

Other ministries, agencies, regional and some city administrations have “Crisis Management” directorates or departments, all with disaster protection responsibilities (among others).

A number of ministries and agencies (e.g. the ministries of defence; environment and waters; agriculture and health; transport, information technologies, and communications; energy; the Nuclear regulatory Agency), as well as the Bulgarian Red Cross maintain specific disaster protection formations/teams, described in respective annexes to the National Disaster Protection Plan.

There is no publicly available information on a capacity to mobilise additional personnel. It could be assumed that, when the locally available capacity is overwhelmed, the assistance will be provided by activating additional components of the Unified Rescue System, including formations of the armed forces, volunteer formations, trade companies and, if necessary, international assistance.

Involvement of volunteers, volunteer organisations, and specialised NGO personnel

Since 2011 the Disaster Protection Act regulates the involvement of volunteers in disaster protection through the creation of municipality-based volunteer formations. As of October 2015 the Registry of volunteer formations, maintained by the FSCP General Directorate, lists 169 formations with an authorised strength of approximately 4 000 positions of which volunteers have been assigned to 2 470 positions.

The main non-governmental organisation with disaster protection capabilities is the Bulgarian Red Cross, including a number of specialised organisations:

- Bulgarian Red Cross Youth;
- Mountain Rescue Service;
- Water Life Saving Service;
- Refugee-Migrant Service.

Over 19 000 volunteers are involved in the activities of the Bulgarian Red Cross. In 2013, 4 917 of them had basic volunteer training and 5 602 – specialised training in volunteer programmes.⁵³⁸

Involvement of private businesses

Several groups of private actors play important roles in in specific aspects of disaster protection:

⁵³⁸ Facts and figures for the activity of the Bulgarian Red Cross 2013, available in Bulgarian at www.redcross.bg/uploads/19794.file/Facts%26Figures_2013_bul.pdf (accessed 19 December 2014).

- Owners/operators of critical infrastructures, including transport and energy infrastructure, dams, chemical plants, etc.;
- Owners/operators of electronic communications networks, e.g. GSM operators;
- Media, in particular electronic media;
- Private hospitals and providers of other health services;
- Companies, providing general transport and construction services.

National educational programmes

The education is considered an important component of disaster prevention, readiness and adequate response. The Disaster Protection Act stipulates that students at interim school (5th to 7th grade, i.e. 11 to 14 years old students) need to get the basic knowledge on disaster risks and the respective ways of behaviour and action, while high-school and university students need to have knowledge on disaster protection corresponding to their educational profile and specialty.⁵³⁹ In addition, the Minister of Education and Science, in coordination with the Minister of the Interior, approves educational programmes, materials and tools for kindergartens and schools, as well as plans for disaster protection training of the teachers.⁵⁴⁰

In October and November 2014, the “G.S. Rakovski” Defence Academy in Sofia conducted a pilot course on disaster prevention for teachers.⁵⁴¹

Relevant educational programmes are provided by several universities, including:

- The “G.S. Rakovski” Defence Academy in Sofia has a masters’ programme in “Protecting the population and the critical infrastructure”;⁵⁴²
- The National Military University, Veliko Tarnovo, has a masters’ programme in “Protecting the population in disasters, accidents and catastrophes”;⁵⁴³
- The Technical University of Varna provides a bachelor’s degree in “Protecting the population in disasters and accidents”;⁵⁴⁴
- The Agriculture University in Plovdiv provides a masters’ degree for environmental experts in “Protecting the population and the environment in natural disasters and accidents”;⁵⁴⁵
- The University of Shumen provides a masters’ programme for pedagogues in “Competences and skills in disasters and accidents.”⁵⁴⁶

5.2 Materiel (non-financial) resources

The material component of the first response, provided by FSCP, and the planned use of military assets are described in section 3.1 above. Additional, more specific military assets used in disaster response involve primarily the use of helicopters for aerial reconnaissance, search and rescue, and fire-fighting.

⁵³⁹ Disaster Protection Act, Article 16(2).

⁵⁴⁰ Disaster Protection Act, Article 16(3).

⁵⁴¹ See www.mon.bg/?go=news&p=detail&newsId=852 (in Bulgarian).

⁵⁴² See http://rnda.armf.bg/wp-content/uploads/000s/Pr_ZNKI2009_MAGspec.php.

⁵⁴³ See www.nvu.bg/node/314. The programme is coordinated with General Directorate FSCP.

⁵⁴⁴ See www.tu-varna.bg/tu-varnaumo/images/stories/uchebni_planove/bak_mag_sled_sredno/znba_rb.pdf.

⁵⁴⁵ See www.au-plovdiv.bg/cntnr/CMD/2012/anotacia/33.pdf.

⁵⁴⁶ See <http://shu-bg.net/faculties/pf/spec>.

The State Agency “State Reserve and Wartime Stocks” maintains stocks of fuel, chemicals, food, metals, spare parts, wooden materials and paper, hospital and sanitary materials, medicines, tents, blankets, etc. Ministries and agencies, as well as companies also maintain a certain level of general and specific reserve stocks.

Bulgaria maintains a number of organisational and technical systems in place to monitor various hazards and risks and, when necessary, issue warnings and alerts. The key systems and services are briefly presented below.

The National Seismological Service has a network of 14 stations and observatories and two local networks – “Provadia” and “Kozloduy” (see Figure 69⁵⁴⁷). The Seismic Centre in Sofia collects, processes, analyses and interprets the information. This allows real time determination of the parameters of earthquakes in the country and the neighbouring areas.

A computing centre at the National Institute of Geophysics, Geodesy and Geography (NIGGG) facilitates the collection, processing and analysis of data from national and local accelerometric networks. That allows to evaluate and identify the dynamic characteristics of the seismic influences in environment, building and equipment for the needs of the earthquake engineering, prevention and mitigation of the seismic risk.⁵⁴⁸ A number of collaborative arrangements are in place to support these aims. Currently, NIGGG represent Bulgaria in a project to establish “Black Sea Earthquake Safety Net(work) – ESNET” with partner institutes from Romania, Moldova, and Turkey.⁵⁴⁹



Figure 69: The network of seismic stations of the national seismological service.

⁵⁴⁷ “Operational Research Activity,” presentation of the National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, available at www.niggg.bas.bg/wp-content/uploads/2014/02/operat_en.ppt (accessed 3 November 2014).

⁵⁴⁸ Ibid., slide # 16.

⁵⁴⁹ Black Sea Earthquake Safety Net(work) – ESNET, available at www.niggg.bas.bg/projects_bg/esnet (accesses 3 November 2014).

Among the other technical systems, briefly presented above, are:

- The system for radiological monitoring;
- The radio-communication system TETRA⁵⁵⁰
- The Unified Communications System of the state administration, etc.

5.3 Training

FSCP conducts regular training and exercises for its own personnel, as well as representatives of other components of the Unified Rescue System, volunteer formations and NGO personnel.

Specialists are usually trained “on-the-job.” Training requirements depend on the specific position of an individual in the organisation.

The regular tests of the early warning and alert system are used also for training of the personnel involved.

Field and, in particular, computer assisted exercises serve (among others) as a tool to increase the awareness and enhance the decision-making capacity of high-level decision makers.

FSCP maintains and regularly uses its training range in the town of Montana for training first responders (both regular and volunteers), as well as to train decision-makers, e.g. mayors, for rapid reaction in disasters. It is used for international exercises as well, in particular within NATO’s CBRN training programme.⁵⁵¹

5.4 Procurement

5.4.1 Procurement regulations

The Bulgarian Law on Public Tenders incorporates the guidelines of the main European directives, regulating respectively:

- procurement of goods and services, including energy, water, transport and postal goods and services;
- procurement in the field of defence and security.

For the former, the Law on Public Tenders defines thresholds for conducting a public tender, small public tender or just soliciting three from independent contractors. Table 18 presents these thresholds that further distinguish construction and project design from other types of services, as well as the place for delivering the goods or services – on or outside the territory of Bulgaria.

Procurement for the General Directorate “Fire Safety and Civil Protection” (FSCP)—the organization with widest spectrum of crisis management capabilities—is managed by the FSCP directorate through its section on “Public Tenders” and in accordance with the Law on Public Tenders.

FSCP procures goods and services, including construction, maintenance and training services.

⁵⁵⁰ See project PHARE BG 2006/018 – 343.07.08, http://www.nspbzn.mvr.bg/Proekti/proekt_tetra.htm.

⁵⁵¹ See for example <http://bnr.bg/radiobulgaria/post/100231264/mejdunaroden-ucheben-centyr-v-montana-podgotvya-spasiteli>.

Table 18. Procurement of goods and services, thresholds and types of tenders

Type of procurement	The service is provided in or outside the country	Thresholds in thousand BGN ⁵⁵² (excluding VAT)	Tender
Goods and services	in the country	below 15	no tender is necessary
		b/n 15 and 50	3 offers
		b/n 50 and 180 (for goods) or 110 (for services)	'small' public tender
		above 180 (for goods) or 110 (for services)	public tender
	outside the country	below 50	no tender is necessary
		b/n 50 and 100	3 offers
		b/n 100 and 250	'small' public tender
		above 250	public tender
Project design		b/n 30 and 110	'small' public tender
Construction	in the country	below 45	no tender is necessary
		b/n 45 and 200	3 offers
		b/n 200 and 2 150	'small' public tender
		above 2 150	public tender
	outside the country	below 500	no tender is necessary
		b/n 500 and 1 500	3 offers
		b/n 1 500 and 6 000	'small' public tender
		above 6 000	public tender

Procurement cases are announced on the webpage of the FSCP General Directorate.⁵⁵³ The administration of the Council of Ministers maintains an electronic database – a Registry of Public Tenders.⁵⁵⁴ Tenders are announced publicly on the e-Procurement portal of the Public Procurement Agency.⁵⁵⁵

As a rule, multinational procurement is part of bi-lateral or regional projects with financing from the European Union, and the respective procurement rules apply.

⁵⁵² The exchange rate of the BGN to the Euro is fixed at 1 Euro = 1.9558 BGN.

⁵⁵³ For the two main types of procedures see www.nspbzn.mvr.bg/Obst_porachki/ZOP/default.htm and www.nspbzn.mvr.bg/Obst_porachki/Pokani/default.htm, both in Bulgarian.

⁵⁵⁴ Regulation on managing the Registry of Public Tenders, Article 7.

⁵⁵⁵ See http://rop3-app1.aop.bg:7778/portal/page?_pageid=173,1&_dad=portal&_schema=PORTAL for the English language version of the portal.

5.4.2 Procurement procedures

Bulgaria's legislation on public procurement is generally considered to be in line with respective norms of the European Union.

The FSCP General Directorate utilises the common procedures of:

- “public tenders”
- “public invitations”⁵⁵⁶
- limited procedure or procedure for negotiation with announcement, in cases of procurement of special (military or dual use) equipment and services, including construction.⁵⁵⁷

All these procedures are described in detail in the Law on the Public Tenders.

The same norms and procedures apply when a tender is part of a procurement within the operational programmes, partially financed by the European Union.

5.5 Niche capabilities

Bulgaria has some crisis management capabilities of potential interest to the EU and individual Member States, such as:

- medium search and rescue units for urban environments;
- medium CBRN units;
- land units for fighting forest fires.

Possibly of interest is also the training range of the FSCP General Directorate, located in the town of Montana.

Disaster protection capabilities of the defence ministry are also of value for international partners, in particular mobile medical teams of the Military Medical Academy, which are regularly deployed abroad in disaster response operations.

Finally, Bulgaria hosts the NATO Centre of Excellence for Crisis Management and Disaster Response,⁵⁵⁸ accredited by the North-Atlantic Council in 2015. The Centre provides analyses, recommendations, training and exercises in multinational formats of interest to the DRIVER community of users, EU and Member States.

⁵⁵⁶ Law on Public Tenders, Chapter 8a.

⁵⁵⁷ Law on Public Tenders, Article 3(2) and those refereeing to it.

⁵⁵⁸ Its official website is at <http://cmdrcoe.org/>.

Resources

Legislative acts

Constitution of the Republic of Bulgaria, *State Gazette* 56 of 13 July 1991; last amendment *State Gazette* 12, 6 February 2007.

Classified Information Protection Act, *State Gazette* 45 (30 April 2002), last amendment *State Gazette* 53 (28 June 2014).

Crisis Management Law, *State Gazette* 19 (2005), cancelled in 2009 through amendments to the Law on Defence and Armed Forces.

Disaster Protection Act, *State Gazette* 112 (19 December 2006), last amendment *State Gazette* 53 (27 June 2014).

Environmental Protection Law, *State Gazette* 91 (25 September 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on Biological Diversity, *State Gazette* 77 (9 August 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on Defence and the Armed Forces, *State Gazette* 35 (12 May 2009), last amendment *State Gazette* 98 (28 November 2014).

Law on Health, *State Gazette* 70 (10 August 2004), last amendment *State Gazette* 98 (28 November 2014).

Law on Personal Data Protection, *State Gazette* 1 (4 January 2002), last amendment *State Gazette* 15 (15 February 2013).

Law on Public Tenders, *State Gazette* 28 (6 April 2004), last amendment *State Gazette* 40 (13 May 2014).

Law on Territory Planning, *State Gazette* 1 (2 January 2001), last amendment *State Gazette* 105 (19 December 2014).

Law on the Bulgaria Red Cross, *State Gazette* 87 (29 September 1995), last amendment *State Gazette* 80 (14 October 2011).

Law on the Consultative Council on National Security, *State Gazette* 13 (11 February 1994), last amendment *State Gazette* 35 (12 May 2009).

Law on the Forests, *State Gazette* 19 (8 March 2011), last amendment *State Gazette* 98 (28 November 2014).

Law on the Ministry of the Interior, *State Gazette* 53 (27 June 2014), last amendment *State Gazette* 98 (28 November 2014).

Law on the Safe Use of Nuclear Energy, *State Gazette* 63 (28 June 2002), last amendment *State Gazette* 98 (28 November 2014).

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Law on the State Budget of the Republic of Bulgaria for 2014, *State Gazette* 109 (20 December 2013).

Law on Waters, *State Gazette* 67 (27 July 1999), last amendment *State Gazette* 98 (28 November 2014).

Other normative acts

National normative documents

Ordinance on the conditions and procedures for conducting evacuation and de-concentration, *State Gazette* 103 (28 December 2012).

Regulation # 8 on the conditions and procedures for protecting forest territories from fires, *State Gazette* 38 (18 May 2012).

Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks, *State Gazette* 84 (2 November 2012), as amended in *State Gazette* 9 (31 January 2014).

Regulation on Emergency Planning and Emergency Preparedness in Case of Nuclear and Radiation accident, *State Gazette* 94 (29 November 2011).

Regulation on managing the Registry of Public Tenders, *State Gazette* 89 (31 October 2000).

Regulation on the functions, tasks and organization of the work of the Security Council to the Council of Ministers, *State Gazette* 116 (7 October 1998), last amendment *State Gazette* 81 (30 September 2014).

Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them, *State Gazette* 81 (23 October 2012), as amended in *State Gazette* 19 (26 February 2013).

Regulation on the structure and the activity of the Ministry of the Interior, *State Gazette* 60 (22 July 2014).

Regulations of the conditions and procedures for the functioning of the National System for Early Warning and Alerts to the executive bodies and the population in disasters and air threats, *State Gazette* 20 (9 March 2012), amended *State Gazette* 60 (22 July 2014).

Regulation # 13 of 29 January 2004 on the conditions and procedures for technical maintenance of dams and relevant facilities, *State Gazette* 17 (28 March 2004).

Regulation Iz-1669 of 17 August 2012 on the order of creating and maintaining a registry on the volunteer formations for overcoming or containing disasters, fires, and emergency situations and elimination of their consequences, Ministry of the Interior, *State Gazette* 67 (31 August 2012).

Instruction # 8121z 915 of 1 December 2014 on the conditions and procedures for performing operational protection during floods, *State Gazette* 101 (9 December 2014).

European Directives

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31996L0082> (to be repealed and replaced in 2015 by Directive 2012/18/EU)

Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism, L 347/924 (12 December 2013), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1313>.

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007L0002&from=EN>

Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (Text with EEA relevance), <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007L0060&from=EN>

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012L0018>

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National Plan for Disaster Protection, approved by Decision 973 of the Council of Ministers of 29 December 2010, amended with Decision 1004 of 12 December 2012 by adding Supplement 1 “Protection in Earthquakes” and Supplement 2 “Protection in Flooding”; amended with Decision 767 of 14 September 2012 by adding Supplement 3 “External plan for accidents in Kozloduy NPP”; amended with Decision 509 of 17 July 2014 (consolidated version was published). – 412 pp (the Plan), 33 pp. (Supplement 1), 30 pp. (Supplement 2), 231 pp. (Supplement 3). – all in Bulgarian.

National Programme for Disaster Protection 2009-2013, Adopted with a Decision of the Council of Ministers, Protocol 21 of 28 May 2009. – 55 pp., in Bulgarian. Available at www.nspbzn.mvr.bg/NR/rdonlyres/9A624639-C96C-4614-A73A-2E2C19EB1F25/0/NPZB.pdf (accessed 7 October 2014).

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Strategy for Mitigating Disaster Risks 2014-2020, Council of Ministers of the Republic of Bulgaria (2014), available at www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=894 (in Bulgarian), Accessed 26 October 2014.

Online resources

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Executive Agency “Forestry,” www.nug.bg/lang/2/index

Executive Environment Agency, <http://eea.government.bg/en>

Ministry of Agriculture and Food, www.mzh.government.bg/mzh/en/Home.aspx

Ministry of Environment and Water, www.moew.government.bg

Ministry of Regional Development, <http://www.mrrb.government.bg>

National Audit Office, www.bulnao.government.bg/en

National Centre of Radiobiology and Radiation Protection to the Ministry of Health, www.ncrrp.org/new/en

National Statistical Institute, www.nsi.bg/en

Nuclear Regulatory Agency, <http://www.bnra.bg/en>

Public Procurement Agency, www.aop.bg

State Agency “State Reserve and Wartime Stocks,” <http://www.statereserve.bg>

State Commission on Information Security, <http://www.dksi.bg/en/>

Relevant associations, international organisations, initiatives and projects

Black Sea Earthquake Safety Net(work) – ESNET, <http://esnet.infp.ro/en>

Crisis Management and Disaster Response Centre of Excellence, <http://cmdrcoe.org/>

Disaster Preparedness and Prevention Initiative for South Eastern Europe, www.dppei.info

Hyogo Framework for Action, www.unisdr.org/we/coordinate/hfa

National Association of Municipalities of the Republic of Bulgaria, <http://projects-namrb.org/index.php/en/>

Registry of the volunteer formations for disaster protection on the territory of the Republic of Bulgaria and number of volunteers by municipality, 19 December 2014, available at www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm.

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Bulgarian Red Cross, www.redcross.bg

Centre for National Security and Defence Research, Bulgarian Academy of Sciences, www.cnsdr.bas.bg

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Senior leader of the General Directorate "Fire Safety and Civil Protection," Ministry of the Interior
 Director, Centre for National Security and Defence Research, Bulgarian Academy of Sciences



Driving Innovation in Crisis Management for **E**uropean **R**esilience

CROATIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: AIT (Bettina Jager)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

With a risk factor of 4.28 percent, Croatia ranks on the 120th position of the World Risk Index. Croatia shows a high exposure to floods, earthquakes, wildfires and droughts. Due to its past experiences of the Croatian War also accidents with leftover mines are a realistic threat in Croatia. In Croatia, the crisis and disaster management is built upon a civilian-based approach (Samardžija et al. 2014), which is conceived with the focus on protection and rescue. As the main source of law, the Protection and Rescue Act, adopted in 2004, defines the institutional structure, the rights and responsibilities and procedures and management to ensure the protection and rescue of human lives. After reforms in the period between 2000 and 2012, the civil protection, fire-fighting and a 112 system was included in the Croatian civil security system. The civil protection system in Croatia involves all levels – from the community level to the state level, but the National Protection and Rescue Directorate (NPRD) has been considered “as a single administrative organisation regulating norms and standards in the protection and rescue area”. The heads of local and regional self-government units as well as the director of the NPRD at national level are concerned with the establishment, development and the functioning of civil protection (IPA CP Cooperation Programme II 2014). The National Protection and Rescue Directorate, which is affiliated to the Ministry of Interior is the leading national authority for civil protection in Croatia. As a strategic actor at the national level, the NPRD is concerned with the administrative organisation by drafting plans, the assessment of risks and the coordination of the involved actors in the area of protection and rescue (Swedish Civil Contingencies Agency 2009). Furthermore, it assumes also a tactical-operative role by activating operational units, i.e. the police etc. At the operational level, the local and regional authorities are mainly responsible to organise the response in the case of an event. Since a disaster has been declared, the coordination and command competences will be transferred to the NPRD, which is activating the operational units. Thereby the NPRD can resort to the Croatian Fire-fighting Association, Croatian Mine Action Centre, Croatian Mountain Rescue Service, Volunteer Fire Brigades, Radio amateurs and other organizations, Croatian Red Cross, Croatian Rescue Dog Association and, if divers are needed, the Croatian Divers Association (European Commission 2014). The participation of the private sector in protection and rescue measures is based on a public-private-partnership. Despite the coordination competence of the NPRD, if assistance from the Croatian Armed Forces or police forces is required, a reconciliation between the Ministry of Defence, Ministry of Interior and the National Protection and Rescue Directorate may be necessitating. Apart from this, in mine accidents, CROMAC will take over the coordination function.

It is estimated that, the total protection and rescue expenditures, including fire-fighting, civil protection and other regular operational forces average approximately 0.45% of the GDP (for the year 2006). Amongst other, Croatia’s know how in demining represent one of the most exemplarily capabilities of Croatia. Furthermore, it has been emphasised, that Croatia features a professional protection and rescue system as well as a remarkable commitment of the citizens to engage voluntarily. As one of the new Member States of the European Union, Croatia assumes an important role in regional initiatives and benefits from its wide cooperation network with regional partners as well as with international organisations.

Table of Contents

CROATIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	403
Overview.....	404
Table of Contents	405
List of Tables.....	407
List of Abbreviations.....	408
1 Policy	410
1.1 Risk Assessment	411
1.1.1 Natural Hazards	414
1.1.1.1 Flood	416
1.1.1.2 Earthquake	416
1.1.1.3 Extreme Temperature and related hazards	417
1.1.2 Technological Hazards	418
1.2 Policy and Governance	418
1.2.1 Strategy scope and focus.....	420
1.2.2 Monitoring and analytical support to policy making; R&D	420
1.2.3 Policy for Prevention	421
1.2.4 Policy for Preparedness	421
1.2.5 Policy for Response	422
1.2.6 Policy for Relief and Recovery	422
1.3 Financing	423
1.3.1 Investing in preparedness	423
1.3.2 Investing in consequence management.....	423
1.4 Policy review, Evaluation & Organisational Learning	424
1.4.1 Post-Disaster Assessment.....	424
1.4.2 Departmental Lessons Learned systems	425
1.4.3 Centralised (national) Lessons Learned system	425
1.4.4 International exchange for Lessons Learnt	425
1.4.5 Regular policy reviews.....	426
1.5 Resilience	426
1.6 Information sharing and data protection	426

2	Legislation	430
2.1	Crisis (emergency, disaster) management concept.....	430
2.2	General crisis (emergency, disaster) management law	432
2.3	Emergency rule	434
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	435
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	436
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	436
2.7	Legal regulations for international engagements of first responders and crisis managers	438
3	Organisation	440
3.1	Organisational chart.....	440
3.2	Organisational cooperation	445
4	Procedures	446
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	446
4.2	Operations planning.....	447
4.3	Logistics support in crises	447
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	448
5	Capabilities.....	449
5.1	Human resources	449
5.2	Materiel (non-financial) resources	450
5.3	Training	451
5.4	Procurement	453
5.4.1	Procurement regulation	453
5.4.2	Procurement procedures	454
5.5	Niche capabilities	454
	Resources	456
	Legislative acts	456
	Other normative acts	457
	Official documents (white papers, strategies, etc.)	457
	Online resources (e.g. websites of key CM organizations)	461
	Publications	462
	Expert interviews	465

List of Figures

<i>Figure 1: Geographic map of Croatia</i>	411
<i>Figure 2: Climate zones in Croatia</i>	412
<i>Figure 3: Ranking of natural disasters in Croatia by occurrence in the period from 1989 to 2006 (SEEDRMAI 2008)</i>	415
<i>Figure 4: Map of Croatian seismic activity</i>	417
<i>Figure 5: Organisation of emergency response in Croatia (WHO, 2012)</i>	440
<i>Figure 6: The Structure of the National Protection and Rescue Directorate</i>	442

List of Tables

<i>Table 1: Major disasters in Croatia since 2000 (PreventionWeb 2014, EuropeanCommission 2014)</i>	414
<i>Table 2: Summary of mistakes within the response to the Kornati Island Fire</i>	424
<i>Table 3: Overview on operational forces for protection and rescue activities in Croatia</i>	449
<i>Table 4: Overview on current emergency stock holding in Croatia</i>	451
<i>Table 5: Overview on some international training sessions completed by Croatia in the last years</i>	453

List of Abbreviations

CAF	Croatian Armed Forces
CBRN	Chemical, Biological, Radiological and Nuclear
CEA	Croatian Environment Agency (in Croatian language: AZO)
CEP	Civil Emergency Planning
CFA	Croatian Fire-fighting Association
CM	Crisis Management
CMCMH	Crisis Management Committee of the Ministry of Health
CMEP	Civil-Military Emergency Preparedness
CMEP SEE	Civil Military Emergency Preparedness South Eastern Europe
COC	County Operational Centre
CMRS	Croatian Mountain Rescue Service
CRC	Croatian Red Cross
CROMAC	Croatian Mine Action Centre
CW	Croatian Waters
DPPI	Disaster Preparedness and Prevention Initiative
DRR	Disaster Risk Reduction
EAPC	Euro Atlantic Partnership Council
ECMWF	European Centre for Medium-Range Weather Forecasts
ECR	European Centre for the Regions
ECURIE	European Community Urgent Radiological Information Exchange
EIPA	European Institute of Public Administration European Center for the Regions
ERCC	Emergency Response Coordination Centre
EU	European Union
EUMETNET	Network of European Meteorological Services
EUSF	European Union Solidarity Fund
GDP	Gross Domestic Product
ICPDR	International Commission for the Protection of the Danube River
ICPDR	International Commission for the Protection of the Danube River
INSARAG	International Search and Rescue Advisory Group
MEDEX	MEDiterranean Experiment

MFA	Ministry of Foreign Affairs
MoD	Ministry of Defence
Mol	Ministry of Interior
MRCC	National Headquarters for Coordinating Search and Rescue in Rijeka
NATO	North Atlantic Treaty Organization
NMHS	National Meteorological and Hydrological Service
NN	Narodne Novine (means the OG = Official Gazette in Croatia)
NPRD	National Protection and Rescue Directorate (in local language: DUZS)
RACVIAC	Regional Arms Control Verification and Implementation Assistance Centre
SAR	Search and Rescue
SC	Sava River Basin Commission
SEDM	South-East Europe Defence Ministerial
SOA	Security and Intelligence Agency
SOP	Standard Operating Procedure
UN	United Nations
UNDP	United Nations Development Programme
UNISDR	United Nations Office for Disaster Risk Reduction
UN-OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNS	Office for the protection of the Constitutional Order
USAR	Urban Search and Rescue
WHO	World Health Organisation
WMO	World Meteorological Organisation

1 Policy

Pursuant to Art. 1 of the Constitutional Act, (NN 56/90) and amendments, Croatia is a unitary state including three levels of governance, the central level, the regional level and the local level. The regional level of Croatia is divided into 20 Counties and the City of Zagreb. At the local level, the regional administration is sub-divided into 127 towns and 429 municipalities. In the course of the decentralisation process, which began in 2001, the local governments gained more right of self-determination related with more duties, i.e. by the transfer from the national budget to the budgets of the local governments (EIPA and ECR 2014). In Art. 133-138 the Constitution of the Republic of Croatia (NN 85/10) determines the hierarchy and the distribution of rights and responsibilities of the community-level as well as the local and regional self-government.

The main competences of the state include overall legislation and execution, security and defence, foreign and domestic policy, direction and control over the civil service operation and economic development. Whereas the regional level is responsible for tasks of regional importance, education, healthcare, regional and urban planning, economic development, environmental protection, transport and traffic infrastructure, establishment and development of the network of educational, medical, social and cultural institutions, maintenance of public roads and issuing location and construction permits (except in territories of large towns). Municipalities are assuming tasks of local importance which directly address the needs of the citizens, and which are not assigned to state bodies by constitution or act, organisation of settlement and “housing, spatial and urban planning, utility services, primary health protection, social welfare, elementary education, culture, physical culture and sports, consumer protection, environment (protection and improvement of natural environment), fire protection and civil protection and traffic management” ⁵⁵⁹. Additionally, large towns have duties in the maintenance of public roads and the construction and renting permits.

As defined by Samardžija et al. (2014), the Croatian civil security system is characterised by a civilian-based rather than a military-based approach. Originally based on civil defence led by the Ministry of Defence, a shift toward civil protection under the direction of the Ministry of the Interior was made in 1994 (Austrian Red Cross 2014). Regarding the distribution of responsibilities, the civil protection concept of Croatia combines a bottom-up and a top-down approach and envisages the engagement of various stakeholders at all spatial and administrative levels. The Civil protection sector has been identified as the main framework for the provision of prevention, preparedness and response. It covers a wide range of tasks, beginning with risk assessment and the preparation of rescue plans to the monitoring of recent disasters (European Commission 2014).

On the basis of the existing legal framework, an all-hazard approach, including natural disasters as well as major accidents, can be identified. The Protection and Rescue Act, adopted in 2004, has been identified as the main source of law, which defines the institutional structure, the rights and responsibilities and procedures and management to ensure the protection and rescue of human lives. Based on the provisions of the Constitution of the Republic of Croatia, the Croatian Parliament adopted the Strategy of National Security in 2002.

⁵⁵⁹ <http://extranet.cor.europa.eu/divisionpowers/countries/MembersNLP/Croatia/Pages/default.aspx>

1.1 Risk Assessment

The Republic of Croatia covers about 87,609 square kilometres, of which 56,542 square kilometres is mainland. It is home to approximately 4,500,000 inhabitants with an urbanization rate of 59% of the population (United Nations, Department of Economic and Social Affairs 2014).

It is bordering on Slovenia in the northwest, Hungary in the North, Serbia in the East, in the southeast to Bosnia and Herzegovina and southward on Montenegro. Westwards, Croatia has a maritime boundary to Italy (IPA CP Cooperation Programme II 2014). Croatia extends from the furthest eastern edges of the Alps in the northwest to the Pannonia plain and the banks of the Danube in the East (DUSZ 2014). As illustrated in the map (see Figure 70), the central area is surrounded by the Dinaric Alps and its southern parts extend to the coast of the Adriatic Sea.



Figure 70: Geographic map of Croatia

Available at: <http://en.18dao.net/images/3/33/Map-Croatia.jpg>; accessed: 22th September, 2014.

Since Croatia has been a member of the UN International Strategy for Disaster Reduction Hyogo Framework for Action 2005-2015 and the Regional Cooperation Council, risk assessment is an important issue at the Government of Croatia and became even more important since Croatia have joined the European Union in 2013. In particular, in the area of wild fires, monitoring and forecasting concepts of meteorological hazards has been established. Amongst others, it lies within the responsibility of the NPRD to ensure the implementation of the Disaster Risk Reduction capabilities (World Bank 2009). As stated within the National Security Strategy of the Republic of Croatia (2002), a whole range of risk will be considered, which may threaten the survival of the population. The focus covers – apart from military issues – natural and technological catastrophes.

As regulated by the Protection and Rescue Act, the National Protection and Rescue Directorate (NPRD) is responsible for developing the National Disaster Preparedness Plan for Croatia. The NPRD carries out this task on the basis of the National Vulnerability Assessment and the Ordinance on the Methodology for Development of Risk Assessments, and Rescue and Protection Plans. The NMHS is

in charge for the improvement of the quality and the amount of meteorological and hydrological information, as well as for raising awareness and involving the public in this process.

The World Meteorological Organization (2012), indicated, that also other ministries have the duty to conduct risk assessment in their specific area. As an example, the Ministry of Finance performs administrative and other tasks related to collecting and processing data on damages occurred as a result of natural disasters.

According to IPA CP Cooperation Programme II (2014), chemical and/or industrial accidents, transportation of chemicals, nuclear accidents and natural hazards have been regarded as major source of threats. As indicated by Perešin (2013), due to the fact that Croatia is a post-conflict country, which is situated near instable countries, there is a vital threat to become a victim of a terrorist attack. Inter alia triggered by programs of the European Union, vulnerability of Critical Infrastructures has already been addressed from different viewpoints. Radovic et al. (2012) indicated, that a considerable number of Croatian hospitals exhibit a high vulnerability to seismic hazards, because about 30 percent of hospitals were built in the mid of the 19th century and a large proportion is older than 40 years. Moreover, floods and raised level of underground water represent a threat to the critical health infrastructure.

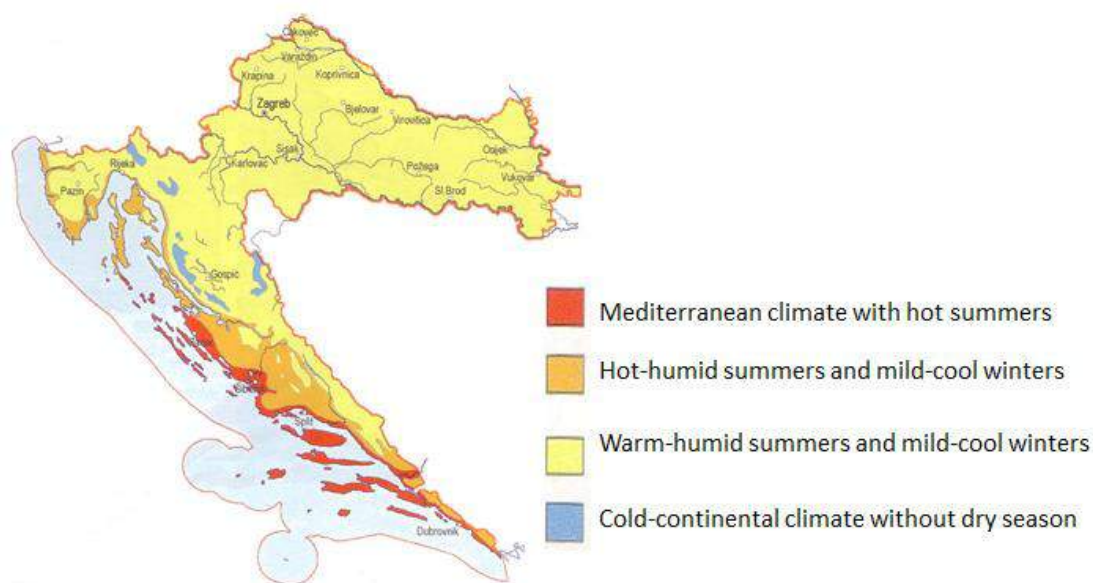


Figure 71: Climate zones in Croatia

Available at: http://www.preventionweb.net/files/22169_20efdr12oct2011wg1croatianastasaho.pdf; accessed: 11th September, 2014.

Croatia is influenced by a Mediterranean and a Continental climate. The Adriatic coast and its surrounding area in the South are characterised by a Mediterranean climate with very warm regions, while the north-west region is the cold part of Croatia. Hot, dry summers and rainy winters with temperatures from 15 to 30°C characterise the coastal area (IPA CP Cooperation Programme II 2014). In general, heavy rainfall is typically for the Dinaric mountain region and the region of Gorski Kotar.

The Croatian weather is mainly influenced by two spheres. On the one hand, the coastal zone of Croatia is – equivalent to the whole eastern rim of the Adriatic, ravaged by Adriatic storms, cyclones

and intense bora winds. These Adriatic wind patterns are strongly correlated to very large scale global weather patterns, the Iceland cyclone and the Azores anticyclone (World Bank 2009). On the other hand, Croatia has a part of the typically European weather risks in the plain, which is characterised by storms, hail and heavy precipitation. In line with other countries in the South Eastern and Central Europe, Croatia is highly exposed to natural hazards, especially to floods, wildfires, earthquakes, heat waves, strong winds, and droughts (World Bank 2009), but Samardžija et al. (2014) indicated, that also technological accidents have to be considered in Croatia.

An overview on the major disasters in Croatia since 2000 is provided in Table 1.

Table 19: Major disasters in Croatia since 2000 (PreventionWeb 2014, EuropeanCommission 2014)

Date	Crisis Description	# of persons killed	consequences
May 2014	Flood	2	Hundreds of evacuees, damages to infrastructure and thousands homeless
February 2014	Flood		No fatal casualties
June 2012	Transport accident	8	-
November 2012	Flood	-	No fatal casualties
January 2010	Flood	-	No fatal casualties
May 2010	Flood		
July 2009	Transport accident	6	55 casualties
September 2008	Transport accident	14	-
August 2007	Fire Accident "Kornati Island Accident"	12	One Badly injured fire fighter
July 2007	Central/Eastern Europe Heat Wave		-
March 2006	Central Europe Floods		-
December 2005	Extreme temperature/Cold Spell	5	-
February 2005	Storm	2	-
July 2003	Extreme temperature/Heat Wave	788	-
May 2002	Transport accident	11	-
2001	Flood	-	1,200 people affected, no fatal casualties
August 2000	Wildfire	1	-
June 2000	Extreme temperature/Heat Wave	40	-
2000	Flood	-	600 people affected, no fatal casualties

1.1.1 Natural Hazards

With an exposition of 11.53% in the World Risk Matrix (UNU-EHS and Alliance Development Works 2014), natural hazards account in sum the majority of hazards in Croatia. In comparison with the other ten countries covered in the report of SEEDRMAI (2008)⁵⁶⁰, Croatia is relative highly exposed to

⁵⁶⁰ In the frame of the desk study the focus is on the region of South East Europe (SEE) and provides risk profiles of the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Moldova, Montenegro, Romania, Serbia, Slovenia and Turkey.

extreme temperature, floods and windstorms. Regarding the occurrence of natural events, floods clearly lead the ranking of natural disasters, followed by wildfires and extreme temperatures, as illustrated in Figure 72.

As summarised by Samardžija et al. (2014), the strongest potential losses for Croatian inhabitants are expected from floods, droughts, landslides and earthquakes. The most of the population is exposed to droughts (298,949 citizens exposed) followed by earthquake (57,890).

Figure 72: Ranking of natural disasters in Croatia by occurrence in the period from 1989 to 2006 (SEEDRMAI 2008)

In the frame of a comparative study of the regulations regarding major risk management, earthquakes, forest fires, floods, storms, landslides and drought has been identified as main natural hazards (Higher Institute for Emergency planning 2003). In the reference period of 2003 to 2012, seven major natural events have been observed by the World Bank (2013). They caused a total damage of USD 410 million, which correspond to a share of 0.6 % of the GDP. Although, floods rank first on the list of observed events in the last 30 years (see Figure 72), droughts, extreme temperatures and wildfires caused the most economic damage (PreventionWeb 2014).

The World Meteorological Organization (2012) explained, that forest fires mainly occur during dry periods throughout Croatia and especially during summer in the coastal areas when fire-fighting interventions require the engagement of substantial material, technical and personnel resources. As a big problem, the organisation emphasised that an evacuation of large numbers of tourists might be needed. Furthermore, the most people had been killed by heat waves in 2000 and 2003. Until now, the earthquake in 1996 and the floods have affected most people in Croatia.

The South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative (2008) indicates that, until the year of publication, technological hazards, such as transport accidents caused the highest amount of deaths, followed by extreme temperature. Due to its potential extent floods and earthquakes may affected a wide area and thereby a big part of the population.

1.1.1.1 Flood

The rivers Sava, Drava, Mura, Danube, Zrmanja, Krka, Cetina and Neretva are the eight major rivers in Croatia that have been included in the Sava River Project for Flood Management (2014), (SEERDRMP, UNDP Croatia, and UNDP 2011).

SEE RDRMP et al. (2011) stated, that Croatia is suffering heavily from meteorological hazards:

River flooding occurs frequently. Croatia is located within the Danube basin and is under the influence of the Danube and Sava rivers and their tributaries. Around 15% of the territory of Croatia territory is prone to flooding on major rivers. This area contains 57 settlements and 87,000 residents. Between 1925 and 2000 23 destructive floods struck in seven different river basins. Flash floods affect 85 settlements containing 160,000 residents.

In the mountain area, flash floods and snowstorms during the winter season frequently occur. Especially Zagreb is threaten by flash floods. Effects of climate change, in particular an increase of the soil moisture and the warming trend will sharpen Croatia's vulnerability to several hazards.

Flood protection systems are extremely complex and comprise a large number of structures that regulate and protect water (Samardžija et al. 2014). As a governmental organisation, Croatian Waters is responsible for the flood risk management, floods risk assessment and for floods defence planning. CW conducts integrated management of Croatian water resources on four river basin districts comprising one or more river basins of the major watercourses or parts thereof, which constitute a natural hydrographic unit (World Meteorological Organization 2012).

According to ICPDR (2012), the flood events in 2010 on the Croatian rivers were caused not only by an extreme precipitation in the territory of Croatia but also due to a large inflow from the upstream parts of the river basin in the neighbouring countries.

As mentioned by Radovic, damages to hospitals in Varaždin, Gospić, Osijek, Šibenik as results of heavy rain and/or poor maintenance were recorded in the past. In the meantime the Ministry of Health and Social Welfare has become aware of the risk for critical health facilities and has made reasonable endeavours in the field of crisis preparedness, i.e. risk assessment on the basis of WHO standards. According to the World Risk Report (2014)⁵⁶¹, Croatia ranks on the 120th global position with a relatively low risk profile of 4.28%. Regarding the exposure to natural hazards, the climatic diversity of Croatia can be identified as a relevant factor. The National Human Development Report noted that there are "large spatial differences in Croatia" – especially between the continental lowland, the transitional mountain area and the Adriatic coast (for comparison – see Figure 71).

1.1.1.2 Earthquake

As found out by the IPA Beneficiary Country Needs Assessment (2011), similar to other Balkan areas, seismic hazards must be taken into account in Croatia. About 36% of the state territory can be threatened by seismic hazards (magnitude from 8-10 It has been indicated that the earthquakes

⁵⁶¹ The World Risk Report (UNU-EHS and Alliance Development Works 2014) expresses the risk "of becoming a victim of a disaster as a result of vulnerability and natural hazards such as earthquakes, storms, floods, droughts and sea level rise" on the basis of multiplying the exposure towards natural hazards, susceptibility depending on infrastructure, etc., coping capacities depending on the governmental structure, etc. and adaptive capacities related to future natural hazards and the impacts of climate change.

caused an economic loss of USD 5 million during the last 33 years. Figure 73 shows the epicentre of about 30,000 earthquakes in Croatia. Every year, earthquakes, which have a magnitude higher than 6 on the Richter scale, occur. The population shall anticipate about 65 earthquakes per year.

It has been explained by SEEDRMAI (2008), that the Pannonian Basin is characterised by a typical intraplate activity with a less frequency of occurrence, but an intensive impact. The highest amount of seismic activity has been observed in the coast area. The latest seismic event was the Jabuka Island Earthquake, occurred in 2003 in the middle of the Adriatic Sea. It has been labelled as one of the heaviest quakes within the Adriatic microplate (South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative (SEEDRMAI) 2008). As critically noted by SEEDRMP (2011), spatial plans concerning the seismic risk are available at the national and the municipal level. A closer look at risk areas has been given to the typical tourist zones at the coast.

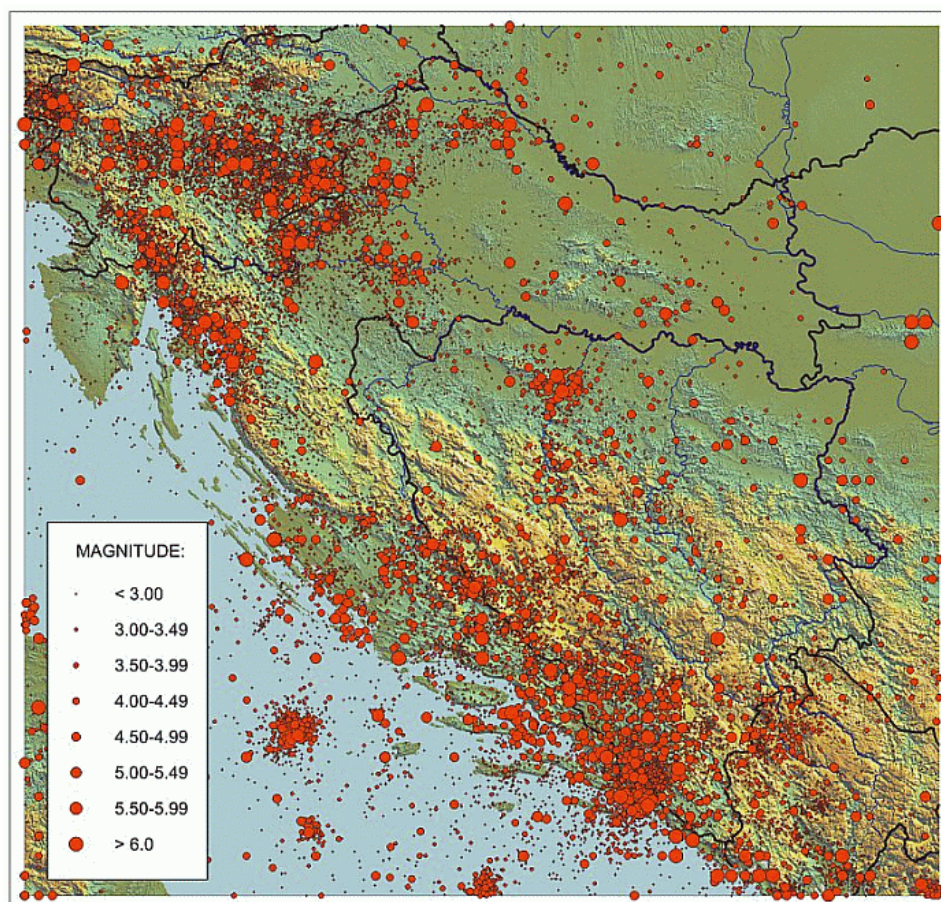


Figure 73: Map of Croatian seismic activity

Available at: <http://seekms.dppi.info/data/map-of-croatian-seismicity>; accessed: 21st September, 2014.

1.1.1.3 Extreme Temperature and related hazards

As emphasised by SEEDRMAI (2008), Croatia is very susceptible to extreme temperatures. An upward trend of warming in summer, a decrease of soil moisture in spring and an uncertainty of surface snow in Northern Croatia have been identified within the United Nations Development Programme. 2009. Furthermore, as a consequence of the climate change, heat waves will become more likely, which represents an increased probability of wildfires in a broader area (Holcinger 2011). Long periods of extremely hot temperatures have already claimed many deaths per year and caused an

average of annual costs of EUR 176 million between 2000 and 2007. Exemplarily, the heat wave in June 2000 affected the four big cities Zagreb, Split, Osijek and Rijeka – in sum, 200 people and claimed about 40 deaths. The drought has been considered responsible for a huge amount of economic loss, as an example drought in 2003 caused a damage of USD 330 million. Particularly badly affected was the city Dubrovnik in the end of July 2003. Within only a few days, wildfires caused a damage of USD 177.5 million (United Nations Development Programme. 2009).

In that context, it has been explained by the World Meteorological Organization (2012) that a long and dry seasons without rainfall, accompanied by high temperatures are in general likely to lead to severe drought.

The Kornati Island Accident in August 2007 was considered as the largest fire accident in the history of Croatia, which prompted the Office for National Security of Croatian Parliament and the Ministry of Interior to order an in-depth exploration by a voluntary research team composed of researchers from various Croatian Universities and Institutions (Stipanicev and Viegas 2009). In the frame of a post-disaster assessment, it has been ascertained that a natural phenomenon known as “burning of non-homogenous gas mixture,” i.e. a high temperature burning, with fast expansion of hot gasses caused the accident (Samardžija, Tišma, and Skazlić 2014), whereby a total area of 99,887 square kilometres was burned (Stipanicev and Viegas 2009).

The Mediterranean region, as well as the eastern area of Croatia, suffers the most from heat waves. Thereby, the risk for wildfires will be increased and crops will be devastated.

1.1.2 Technological Hazards

The Higher Institute for Emergency Planning (2003) regarded chemical/industrial, traffic and transport-related risks as well as marine pollution and nuclear accidents as relevant technological risks. Although, Croatia does not operate a nuclear power plant, there are two nuclear power plants in the neighbouring countries. Located in a distance of 30 kilometres to Zagreb, the nuclear power plant in Krško (Slovenia) poses a realistic hazard for Croatia. Another nuclear power plant is bordering on the north-eastern area of Croatia (Paks in Hungary) (Republic of Croatia 2012).

1.2 Policy and Governance

There are several levels of civil protection related to emergency situations: international, national, ministerial, regional and local level as well as private sector, volunteers and NGOs.

As explained at the Website of the European Commission (2014):

The bodies responsible for harmonising operations of protection and rescue operational forces at all levels of responsibilities ranging from local to national ones and depending on the type and other specifics of the emergency consider the structure and size of protection and rescue operational forces that are to be engaged.

At the central level, the focus mainly lies on risk assessment, preparation of the policy and legal framework, ensuring the efficient functioning of the protection and rescue system as well as the funding of fire brigades and administrative supervision over fire-fighting organisations (EIPA and ECR 2014).

The Government of Croatia is the responsible body for coordinating activities of national agencies, including several ministries, in particular the Ministry of Defence, the Ministry of the Interior, the Ministry of the Sea, Transport and Infrastructure, the Ministry of Agriculture, Forestry and Water Management, the Ministry of Environmental Protection, Physical Planning and Construction and the Ministry of Health and Social Care (Government of the Republic of Croatia 2005). Based on the Act on the Structure and Scope of Activity of the Central State Administration Authorities, an emphasis lies on the National Protection and Rescue Directorate, which is affiliated to the Ministry of the Interior and integrates a wide range of competencies – beginning with the preparation of plans, over the management of operational forces to an overall coordination of various actors of the protection and rescue system. In the current policy, the Ministry of the Interior with the assigned inspectorate for fires and explosions and the Ministry of Defence with the capacity of special fire-fighting forces and the anti-fire escadrille play an important role in the crisis management of Croatia.

If a disaster occurs, the Crisis Management of the Government will be activated, including the Prime Minister and responsible ministers. In general, the civil protection sector is in direct command of the NPRD and local civil protection forces, which provides material assets and equipment during a disaster or major accident.

With a strong emphasis on the self-sufficient principle, the local self-governments are important bodies of the crisis management in Croatia. Due to the fact, that counties are responsible for local issues (Swedish Civil Contingencies Agency 2009), the heads of the local and regional self-government units are mainly in charge to ensure the establishment of civil protection by recruiting, mobilising and equipping appropriate protection and rescue organisations.

At the regional level, the duties include an annual assessment of the status of protection and rescue, if necessary, an adoption of threat assessments and drafting of protection and rescue plans, preparing guidelines for the organisation and development of a protection and rescue system, funding of services, performing protection and rescue measures and activities, establishing a Committee for the protection and rescuing at local level, coordination of all bodies in civil protection and fire protection at the county level and in the case of an immediate disaster at the county level, the mobilisation and coordination of all resources needed by the Head of County.

Local authorities are assuming quite similar tasks as the regional authorities, i.e. the obligation to assess the status of protection and rescue annually, preparing guidelines for the organisation and development of a protection and rescue system, take care of the funding etc.

In addition, they are responsible for fire protection plans, the establishment of a public fire-fighting brigade and the encouragement of several activities in the area of voluntary fire-fighting associations. In times of emergencies, the coordination of involved bodies at local level rests on local authorities and the Mayor ensures the mobilisation and coordination of available resources (EIPA and ECR 2014).

The Act on Protection and Rescue encourages the development of self-protection and self-help capabilities of the citizens to be able to “implement measures of personal and mutual protection against threats and the consequences of disasters” (KMS 2014). In consequence, a clear statement has been made, that “each citizen has the right and obligation to be trained in protection and rescue and has the right to receive full and timely information about all threats of disasters, as well as possibilities, measures and activities for protection” (United Nations Office for Disaster Risk Reduction 2009).

1.2.1 Strategy scope and focus

On the basis of a legislation analysis it has been concluded by SEEDRMAI (2008), that a clear scope of the Croatian strategy can be identified. Disaster laws are rather addressing response and preparedness than prevention or mitigation measures. The World Meteorological Organisation recognised the Protection and Rescue Act as the most relevant document concerning the management of disasters.

As mentioned in the frame of the IPA Beneficiary Disaster Risk Reduction Needs Assessment (2011), Disaster Risk Reduction is recommended to become a national as well as a local priority. While the Strategic Development Framework 2006-2013 focuses on measures like flood control, the Strategy of Government Programmes for 2010-2012 refers mainly to response-oriented measures, which are dedicated to improving the protection and rescue and fire-protection systems and the development of an integrated 112 emergency number. Solely, within the Spatial Planning Strategy structural measures have been partly addressed. Limitations exist in the area of risk reduction. In contrast to the well-defined risk assessment approaches to the natural hazards, the risk of technological hazards have been failed to take into account (United Nations Office for Disaster Risk Reduction 2009). The adoption of SEVESO II Directive has drawn more attention on risks posed by technology/industry.

1.2.2 Monitoring and analytical support to policy making; R&D

As a central contact point for appropriate sciences in the area of protection and rescue, a close cooperation of the NPRD and national academia and research institutions has been established. Mandated to monitor and analyse the protection and rescue situation as well as to undertake efforts to continue the improvement of these skills, the NPRD is responsible for promotions and publications concerning the protection and rescue (Swedish Civil Contingencies Agency 2009). Furthermore, cooperation exists in the area of environmental monitoring. As emphasised by Rademaekers et al. (2013), Croatia has thematic databases, which includes interfaces of various systems measuring parameters, e.g. radiological value, weather, seismologic, air quality etc. as well as procedures for providing data to relevant services.

Due to the fact, that early warning, prevention, preparedness and response is centralised at the NPRD, it can prepare coordinated measures based on the existing governmental services, including the Croatian Waters, the NMHS, the Croatian Seismological Survey, the State Service for Public Health and the State Service for Nuclear and Radiological Safety. It has to be mentioned in this context that early warning systems maintenance and operation as well as warning belongs to the duties of authorities on municipal level, too (Swedish Civil Contingencies Agency. 2009).

It was emphasised by SEEDRMP et al. (2011) that the NMHS maintains a database of historical and recent meteorological and hydrological events, including extreme events, in line with WMO-standards. It acts as a provider of value-added services in support of hydro-meteorological risk assessment activities and services based on a real-time monitoring of hazards. Referring to SEEDRMAP (2007), the membership of NMHS in several organisations entails access to comprehensive weather data, which is essential for the national performance of forecasting and early warning. Further memberships exist at MEDiterranean Experiment (MEDEX) of the WMO and ECMWF (European Centre for Medium-Range Weather Forecasts). On the basis of the Standard Operating Procedures (SOP) for the utilization of the NMHS weather forecasts, a demanded linkage was made between the operational data utilization and information exchange between NMHS and

System 112. Improvements in early warning mechanisms can be expected especially by the membership at the ECMWF. As a 24h/365 days per year service for weather and climate-related satellite data, images and products, EUMETSAT (European Organisation for the Exploitation of Meteorological Satellites) provides relevant data to the NMHS.

In Croatia, a multitude of systems has been implemented to forecast weather situation, such as 40 manned weather stations, 30 automated weather stations, 2 weather radars and other systems (SEEDRMAP 2011). Weather data are also available through the membership at the network of 24 European National Meteorological Services (EUMETNET), which offer also many training exercises. Pursuant to the Act on Radiological and Nuclear Safety, 2010 (OG 28/10), the State Office for Radiological and Nuclear Safety monitors environmental radioactivity using online and offline systems (Republic of Croatia 2013). In Croatia, the Main Flood Defence Centre was established in the Croatian Waters (CW) as a central organisational unit for the purpose of management, coordination and information on flood defence status. According to the ICPDR (2012), a close cooperation exists between CW, the NMHS and NPRD. In the Danube river basin, water level status is monitored on more than 140 automatic water stations and other water stations relevant for immediate flood defence with data collected in real time. Furthermore, the hydro-meteorological conditions and forecasts of basins in the neighbouring countries are monitored.

1.2.3 Policy for Prevention

The NPRD acts in the field of monitoring while the small-scale planning falls within the competences of the local and regional authorities (European Commission 2014). A general threat assessment and the preparation of appropriate plans are situated at the NPRD. Especially, its subordinated units, namely the Operations & Analysis Department of the Civil Protection Sector and the Firefighting, Protection and Rescue School are concerned with the development of prevention strategies, e.g. risk assessment, hazard monitoring and drafting SOPs (Swedish Civil Contingencies Agency 2009). The Firefighting, Protection and Rescue School is one of the leading agencies, which takes considerable efforts in standardisation of protection and rescue procedures. At the NPRD, a comprehensive data collection has been established, which provides information on all events, accidents and disasters in the country, as well as on big accidents and disasters abroad, disaggregates their consequences and protection and rescue intervention modalities (World Meteorological Organization 2012). The WHO (2012) indicated that health-related DRR activities, like mitigation, preparedness planning and recovery activities have been transferred to the county and municipal levels and are implemented on the basis of the specific hazard profiles.

1.2.4 Policy for Preparedness

The Civil Protection Sector and the Firefighting, Protection and Rescue School are also strongly involved in preparedness measures. While the Prevention, Planning and Inspection Department at the first sector assumes mainly the role of monitoring current disasters, the Firefighting, Protection and Rescue School is the central institution, which is organising the training of professional staff. It also offers training sessions for citizens to enhance the self-help capacities and mutual assistance during disasters and major accidents (Swedish Civil Contingencies Agency 2009). The county level is involved in forwarding information to the population and maintains appropriate infrastructure for the public service sector (WHO 2012).

In order to contribute to disaster management, preparedness and response, the Croatian Red Cross implemented activities by, which prepares disaster response units on local and national level and informs citizens of all ages about correct procedures and behaviour in emergencies.⁵⁶²

1.2.5 Policy for Response

As stated by Samardžija et al. (2014), the authority and responsibility for crisis preparedness and response in Croatia is primarily located at the local level. If the crisis exceeds the capacities at the local level, the NPRD (National Protection and Rescue Directorate) takes over the responsibility at the state level. In case of an event, the Civil Defence Headquarters of the national, the county and the city level are responsible for the coordination of disaster response preparedness. Chaired by the Deputy Prime Minister, the Crisis Management Headquarter of the Government coordinates the main activities to cope with the disaster (Government of the Republic of Croatia 2005).

The Firefighting Sector is focusing on the protection against fires by performing an assessment of the situation as well of the needs of the field staff. As a main coordination body for the fight against fires, especially if they cross county borders, the civil protection sector is concerned with the monitoring of situations and is conducting needs assessment, encompassing record of the status of shelters and the manner in which they are used. Whenever it is necessary, the sector “harmonises joint activities with the Ministry of Defence and the Ministry of the Interior related to the engagement of the armed forces and law enforcement forces, respectively, as well as with other state administration bodies and legal entities in the area of protection and rescue”(IPA CP Cooperation Programme II 2014).

As operational actors, the NGOs and voluntary organisations play an important role in the response to disasters. In particular, the contribution of the Croatian Firefighting Association has been considered as the most important one because it very often participates in response operations and its equipment is very well developed (Samardžija et al. 2014).

A GIS featured database supports the NPRD in the monitoring of the protection and rescue situation, the collecting and analysis of data on hazards and disaster consequences. Moreover, the location of operational rescue forces, as well as equipment and material needs, can be traced.

1.2.6 Policy for Relief and Recovery

No clear responsibilities have been defined for relief and recovery measures in Croatia. Mainly, NGOs carry out recovery measures.

The central authorities or the local governments will arrange the reconstruction of damaged state infrastructure. Due to the fact, that counties and municipalities are responsible for the infrastructure and other public services, they may be held liable for arranging and financing reconstruction efforts (WHO 2012). Also, private companies contribute to relief and reconstruction efforts in the aftermath of disasters. Exemplary was the commitment of Coca-Cola HBC to the Central Europe Flood in 2014. As the state of emergency was declared in Croatia, Serbia and Bosnia and Herzegovina after severe floods, Coca-Cole supports relief agencies at the local level as well as the Red Cross.

The company prompted the assistance of around 3,000 employees and provided water and food. Solely, Croatia received 140,000 litres of bottled water.⁵⁶³

⁵⁶² Information is available at: <http://www.hck.hr/en/category/-disaster-preparedness-and-response-63>; accessed: 21st October 2014.

1.3 Financing

1.3.1 Investing in preparedness

“At the national level funding for disaster management and DRR is a combination of a budget allocations for the National Protection and Rescue Directorate, other respective Governmental entities (HMS, RSS, Croatian Waters, Croatian Forests)”⁵⁶⁴ and funds allocated for the implementation of specific disaster protection plans, i.e. the National Flood Protection Plan, Intervention Plan during Wild and Forest Fires on the territory of the Republic of Croatia etc. Local DRR activities have been supported mainly from national entities. Thus, local governments do not have adequate resources to fulfil their legal mandate regarding DRR (SEERDRMP, UNDP Croatia, and UNDP 2011). Samardžija et al. stated (2014) that the national budget for protection and rescue annually ranges between EUR 60 and 68 million which is some 0.4 percent of the state budget. A major part consists of the cost of NPRD (90 percent), CRC (0.1 percent), CMRS (3.9 percent) and partly of CFA (6 percent). These costs have an annual share of 0.2 percent of the state budget. It was indicated that these organisations also have other funding sources. There is a plan to distribute the financing sources at the national level also to other ministries, in particular to the MoD, MoI, etc.

According to the estimations of the United Nations Office for Disaster Risk Reduction (2009), the annual cost for the Civil Protection System amounted to around EUR 50 million, which is 0.98 percent of GDP. This includes salaries of the public servants involved in Civil Protection, salaries of professional fire-fighters as well as costs for equipment, technologies and emergency assets. At the county level, the allocations for protection and rescue ranged from 0.46 percent to 1.5 percent of the annual budget (1.5 percent allocated by the City of Zagreb). In 2011, the counties have allocated about EUR 15.7 million for protection and rescue.

According to Pollner et al. (2010), Croatia has a budget reserve of USD 5.5 million of annual allocations from the municipal budget fund. 60 percent of the total costs for demining measures were financed by the state budget and Croatia’s public enterprises and 40 percent by donors, EU-funds and the loans of the World Bank.

1.3.2 Investing in consequence management

In Croatia, there are no specific relief funds for preparing the damage of reducing the impact of disasters. The Government of the Republic of Croatia finances the compensation for disaster damage and for alleviating the effects of natural disasters by a reserve of the national budget (Government of the Republic of Croatia 2005). National budget funds are allocated to the National Protection and Rescue Directorate according to the national planning and budget plan. The budget for recovery and investment is covered by the funds of the Ministry of Health and Social Welfare. The WHO (2012) explained, that counties receive lump sums from the national budget and their relevant administrations allocate them according to their annual plans.

⁵⁶³ The article is available at: <http://www.coca-colahellenic.com/sustainability/community/emergencyrelief>; accessed: 12th October, 2014.

⁵⁶⁴ <http://www.gripweb.org/gripweb/sites/default/files/Croatia%20Needs%20Assessment%20-%202011-10-26.doc>

As determined in Art. 40 of the Act on Protection from Natural Disasters, 97 (NN 73/97) and explained in the Criteria for Assessing Disaster Damage, 1998 (NN 96/98), local or regional bodies can reduce the receivables (taxes) or provide financial relief. Insurances play an important role in financing the consequences of disasters. Insurance to reduce the impact of disasters is considering liability issues and covers damages to property caused by natural disasters and personal injuries caused by human-induced risks, i.e. spreading hazardous substances in the environment. The EU Solidarity Fund (EUSF) serves as an effective instrument to provide aid. After the ice storm in January and February 2014, Croatia received EUR 8.6 million to reimburse rescue costs in the affected regions.⁵⁶⁵ In comparison, Croatia was granted aid of EUR 4 million by the EUSF after the heavy rainfall in 2010 to reimburse the cost of alleviation in affected areas (Radovic, Vitale, and Tchounwou 2012).

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

A comprehensive framework for post-disaster assessment has been established at the NPRD, which monitors the protection and rescue situation, collects and analyses data on hazards and disaster consequences and keeps the records on operational protection and rescue forces, their location, equipment and material needs, in a single GIS database (SEERDRMP, UNDP Croatia, and UNDP 2011). Due to the fact, that the NMHS has a focus on analysing previous and current disasters, conducting trend analysis and maintains several memberships in appropriate international organisations, post-disaster assessment belongs inter alia to the tasks of NMHS.

As mentioned in chapter 1.1.1.3, the fire accident at the Kornati Island gave rise to a comprehensive post-disaster assessment at the Office for National Security of Croatian Parliament and the Ministry of Interior. The appointed researchers identified some shortfalls within the response to the disaster and defined 37 recommendations for improvements on that basis (Stipanicev and Viegas 2009).

Table 20 provides an overview on some of the most impressive mistakes in the response to the Kornati Fire. As indicated by the authors of the report, despite the list of mistakes, it should be noted that the accident presents a major challenge for the fire-fighting forces due to its unknown nature.

Table 20: Summary of mistakes within the response to the Kornati Island Fire based on the findings of Stipanicev & Viegas (2009)

Subject of mistake	Short description
Equipment	Radio communication of the fire-fighters was not working well
	Only one airplane was in operation in Croatia
	Only 4 Canadair airplanes for fighting forest fires were available in Croatia
Preparedness	The fire protection of the National Park Kornati was not appropriately organized according to existing plans
	Fire fighters were not wearing the complete working uniform resistant to fire

⁵⁶⁵ Press release is available at: http://europa.eu/rapid/press-release_IP-14-948_en.htm; accessed: 21st September 2014.

Response	False assessment of the situation – because two other large fires were active in the region, the airplane was sent from Kornati Island to another location The rescue of the victims was not organized appropriately
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1.4.2 Departmental Lessons Learned systems

Departmental lessons learned systems could be supposed for the NMHS, the NPRD and the Fire-fighting Protection and Rescue School. Ministries have to provide annual reports on threat assessment of their area of responsibility to the NPRD (European Commission 2014). Annually, the State Office for Radiological and Nuclear Safety provides a report about the “National Implementation of the Obligations under the Convention on Nuclear Safety”. Also, public agencies, which have been established by the government of the Republic of Croatia, have to deliver annual reports. As an example, the Croatian Environment Agency (CEA), which is dedicated to collect, integrates, and process environmental data, provides annual updates⁵⁶⁶ about the environmental information system, a summary of international efforts in the environmental community and reports about progress in the area of projects and cooperation.

1.4.3 Centralised (national) Lessons Learned system

In order to promote disaster risk reduction beyond departmental borders, the Ministry for Science, Education and Sport established a Curriculum Revision Working Group, which involves the Ministry for Science, Education and Sport, the NPRD, NMHS, the Republic Seismological Survey, the Croatian Red Cross as well as other ministries and experts (SEERDRMP, UNDP Croatia, and UNDP 2011). As an example, a close cooperation between the NPRD and the NMHS was stipulated by joint training and improvements to the standard operating procedures across agencies linked to the different threat levels and lessons learnt from each disaster event.

1.4.4 International exchange for Lessons Learnt

Croatia joined the Euro-Atlantic Partnership Council (EAPC), which provides a framework for Planning and Review Process (PARP) in which framework Croatia and NATO define and achieve partner goals. Furthermore, NATO Committee meetings serve as a platform for sharing knowledge and experience between the heads of their national civil emergency planning organisations and members of national delegations at NATO at least twice a year (The Croatian Parliament 2002). In November 2014, Croatia joined the conference entitled, “Sharing information and solutions to reduce flood risk, and enhancing cross-border cooperation in mitigating risk and flood protection” in Sarajevo. It addressed civil protection professionals, water management experts and decision-makers from Albania, Croatia, Republic of Macedonia, Montenegro, Slovenia, Serbia, Bosnia and Hercegovina as well as professional OSCE staff. The RACVIAC-Centre for Security Co-operation of Croatia participated the event to discuss approaches for reducing potential risks from disasters and respond mechanisms with representatives from other countries.⁵⁶⁷ Training programmes in the frame of the Civil Protection

⁵⁶⁶ Publications of CEA are available at: <http://www.azo.hr/Default.aspx?sec=683>; accessed: 12th September, 2014.

⁵⁶⁷ Information is available at: <http://www.oscebih.org/News.aspx?newsid=2034&lang=EN>, accessed: November 8th, 2014.

Module provide a good opportunity for exchange of experience with other representatives and discuss lessons learned by training courses, joint exercises and an experts' exchange system.

1.4.5 Regular policy reviews

Regional authorities, as well as local authorities, have the obligation to draft a report about the assessment of the status of protection and rescue once a year or upon passing their budget (European Commission 2014). This implicates the adoption of outcomes from the threat assessment and draft protection and rescue plans. At ministerial level, administrative authorities have to draft and forward a threat assessment to the NPRD in the segment applying to the region of their competency.

1.5 Resilience

At all levels (state, county, city and municipality) the Republic of Croatia is providing an estimation of the vulnerability of the population,, material and cultural resources, and the environment to natural and man-made disasters and major accidents. Based on these estimations, plans for protection and rescue in the response to potential threats have been prepared at all levels. Therein, a determination of available capacities, as well as equipment, which is on the disposal of each authority level, is provided. One of the sectors of the NPRD is responsible for civil protection managing civil protection forces in case of disasters. For each county departments for civil protection are established (Swedish Civil Contingencies Agency 2009). As an example, an expert of the County Department for Civil Protection from Split Dalmatia (2014) has illustrated the principle of preparing plans on the basis of the Plan for Accidental Marine Pollution in the Republic of Croatia. Each county makes own plans and basically, the County Operational Centre (COC) is responsible for the implementation of procedures and measures for predicting, preventing, restricting, preparedness for and response to disasters by the county contingency plan. COC is also responsible for operational participation in the implementation of the plan and sub-regional plans. A COC always has his commander, and, in this case, it is the harbourmaster.

According to the National Plan for Interventions, the COC of Split-Dalmatia County may take over the operational actions in the areas of operations of neighbouring COC (i.e. COC from both Šibenik-Knin County and Dubrovnik-Neretva County), in case the quantity of the pollution exceeds the capacities of a single COC, or if more than one county might be threatened and if marine pollution can endanger the marine environment, human health and economic use of the sea. In such cases processes are performed in cooperation with the neighbouring COC and under coordination of National Headquarters for Coordinating Search and Rescue in Rijeka (MRCC).

1.6 Information sharing and data protection

The NPRD is responsible for the maintenance of a database on operational forces, assets and measures (Swedish Civil Contingencies Agency 2009). However, in the event of a crisis, public media may become a relevant information source for the population and trigger public pressure, sometimes even dictate the answers to certain types of threats. Despite this fact, at the moment, there is no strategy to promote social media for that purpose (Expert Interview 2014). Governmental entities like the NHMS, the Republic Seismological Survey, Croatian Forests, and Croatian Waters collect,

store and analyse risk information from their areas of responsibility (Samardžija, Tišma, and Skazlić 2014). All of them are linked to the Operation and Communications Centre (Centre 112), which merges and forwards information from different sources (SEERDRMP, UNDP Croatia, and UNDP 2011).

According to Article 14 of the Information Security Act (NN 79/07), the Office of the National Security Council is the central government body for the coordination of information security measures and standards within the Republic of Croatia and the exchange of classified and unclassified information between the Republic of Croatia and foreign countries and organisations.

“Information security measures and standards include organising special data bases for classified information within the Republic of Croatia, as well as for classified information which is transmitted from other countries, international organisations or institutions with which the Republic of Croatia co-operates.”

Public access to environmental data is based on the Act on the Right of Access to Information (OG 25/13). This Act contains provisions that are in accordance with the following acts of the European Union:

- Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information,
- Regulation 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission.

Pursuant to Article 18a of the Act on Personal Data Protection (NN 103/03, 118/06, 41/08 and 130/11), the NPRD has appointed clerk for the protection of personal data which:⁵⁶⁸

- Takes care of the legality of the processing of personal data;
- The realisation of the right to protection of personal data;
- Cooperating with the agency for protection of personal data in connection with the implementation of control of personal data;
- Perform other tasks stipulated by the law on personal data protection and subordinate regulations adopted thereunder.

Within the Aarhus Convention, an implementation report indicated that the Water Act determines the procedure for ensuring the flow of information between the National Protection and Rescue Directorate, the State Water Inspectorate and Croatian Waters (Republic of Croatia 2013). Based on the Ordinance on the Content, Form and Manner of Keeping Water Documents (OG 120/10), Croatian Waters collects and processes water-related data. Based on the Act on Radiological and Nuclear Safety, 2010 (OG 28/10), the State Office for Radiological and Nuclear Safety monitors environmental radioactivity and publishes the results on the website of the State Office.

Furthermore, information related to nuclear safety and the system of preparedness in case of a nuclear or radiological disaster and other information related to radiological and nuclear safety are available at the website. The Croatian Institute for Toxicology and Anti-doping maintains an extra web page to inform the public about hazards of dangerous chemicals and protection measures. In Croatia, the Act on the Right of Access to Information (OG 25/13) extends to all public authorities.

Cooperation for the purpose of data sharing and information exchange has been established with the following organisation:

⁵⁶⁸ Information is available at: <http://www.duzs.hr/page.aspx?PageID=566>; accessed: 21st September 2014.

- IAEA - International Atomic Energy Agency.
- ICPDR - International Commission for the Protection of the Danube River.
- UN/ECE – IAN System (United Nations Economic Commission for Europe).
- NATO – EADRCC (North Atlantic Treaty Organization – Euro-Atlantic Disaster Response Coordination Centre).
- ECURIE (European Community Urgent Radiological Information Exchange).
- UNESCO IOC (Intergovernmental Oceanographic Commission).
- TWFP (Tsunami Warning focal Point).
- Neighbouring countries (Protocols with Slovenia, Bosnia and Herzegovina, etc.).

In the frame of the Community Civil Protection Mechanism, several tools have been developed to facilitate adequate preparedness and effective response to disasters at the EU level:

- MIC (Monitoring Information Centre) European Union.

MIC is located at the European Commission in Brussels. It provides 24 hours/365 days per year information about pending requests for assistance. Dedicated to seek for international assistance if the event exceeds the capacities of the affected country, it monitors the situation in the case of emergencies and major accident within the EU, neighbouring countries and the rest of the world. By a formal request of the affected country, the mechanism can be activated.

- Common Emergency Communication and Information System (CECIS)

In order to provide a rapid response by facilitating the communication between the MIC and national authorities, CECIS is designed as a reliable web-based alert and notification system.

According to the representative of the County Department for Civil Protection (2014), data on volunteers are primarily located at the level of services like NPRD, fire-fighters, CMRS and RC, and have not been united in one single registry of volunteers.

Moreover, on the basis of treaties, the mutual exchange of information is regulated with the following parties⁵⁶⁹:

- The Act of ratification of the North Atlantic Treaty (NN, MU 3 2009).
- Security Agreement between the Republic of Croatia and the North Atlantic Treaty Organization (NN, International Agreement 14/03).
- Agreement between the Republic of Croatia and the European Union on security procedures for the exchange of classified information (NN, International Agreement 9/06).
- Security Arrangements between the Office of the National Security Council (UVNS) of the Republic of Croatia, the EU Council general Secretariat Security Office (GSCSO) and the European Commission Security Directorate (ECSD) for the protection of classified information exchanged between the Republic of Croatia and the EU (October 2007).
- Agreement between the Government of the Republic of Croatia and the Government of the Republic of Bulgaria on mutual protection and exchange of Classified Information.
- Agreement between the Government of the Republic of Croatia and the Council of ministers of the Republic of Albania on mutual protection of Classified Information.
- Agreement between the Government of the Republic of Croatia and the Government of the Republic of Macedonia on exchange and mutual protection of Classified Information.

⁵⁶⁹ Information is available at: <http://www.uvns.hr/default.aspx?id=167>; accessed: 17th September, 2014.

- Agreement between the Government of the Republic of Croatia and the Government of the Republic of Estonia on mutual protection of Classified Information.
- Agreement between the Parties to the North Atlantic Treaty for the Security of Information.
- Agreement between the Government of the Republic of Croatia and the Government of the Czech Republic on mutual protection of classified information.
- Agreement between the Government of the Republic of Croatia and the Government of the Slovak Republic on mutual protection of classified information.
- Notification on coming into effect of the Agreement between the Government of the Republic of Croatia and the Government of the Slovak Republic on mutual protection of classified information (NN, International Agreements 6/10).
- Agreement between the Parties to the North Atlantic Treaty for Co-operation regarding Atomic Information with Secret Technical Annex to the Agreement between the Parties to the North Atlantic Treaty for Co-operation regarding Atomic Information and Confidential Security Annex to the Agreement.
- Notification on coming into effect of the Agreement between the Government of the Republic of Croatia and the Government of the Czech Republic on mutual protection of classified information (NN, International Agreements 8/10).
- Agreement between the Government of the Republic of Croatia and the Government of the French Republic on mutual protection of classified information (NN, International Agreements 7/11)
- Notification on coming into effect of the Agreement between the Government of the Republic of Croatia and the Government of the French Republic on mutual protection of classified information (NN, International Agreements 12/11)
- Agreement between the Government of the Republic of Croatia and the Government of the Republic of Slovenia on mutual protection of classified information (NN, International Agreements 15/11)
- Notification on coming into effect of the Agreement between the Government of the Republic of Croatia and the Government of the Republic of Slovenia on mutual protection of classified information (NN, International Agreements 1/12)

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In sum, there are several strategic papers, which are relevant for civil protection. Two key documents are cited below:

Important milestones to promote national security, have been achieved by the “National Security Strategy”, 2002 (NN 79/07) and the “National Strategy for the Prevention and Suppression of Terrorism”, 2008 (NN 139/08).

National Security Strategy

The National Security Strategy of the Republic of Croatia, adopted in March 2002 (NN 32/02) and amended in 2004, expresses the political views on national security of the Croatian Parliament as the highest political and legislative institution of the Republic of Croatia.

Within the document, security was defined as “a functional area of operation of security institutions and society in general in achieving the security goals and interests of the Republic of Croatia” (Government of the Republic of Croatia 2005). The strategy builds the basis for institutional targets, guidelines and programs to react to “general security challenges and concrete forms of endangering the Republic of Croatia”.

Within the strategy the following principles have been taken into account (The Croatian Parliament 2002):

- Croatia’s present geo-political position is characterized by its determined effort to advance towards and enter Euro-Atlantic and European security organisations.
- State of the security challenges and risks area for the Republic of Croatia.
- State of the system and successfulness of national security operations.
- Available resources.

As described in the National Security Strategy (2002), possible results of natural and technological disasters in the country or a specific region pose a constant security threat for its citizens and material goods.

In detail, the National Security Strategy addresses the following threats (The Croatian Parliament 2002):

- Terrorism;
- Proliferation of weapons;
- Leftover mines and explosive devices;
- Instability of neighbouring countries;
- Natural Disasters;
- Technological Disasters;
- Infectious disease;
- Threats to information systems and the private domain.

Against the background of a prospected EU membership, an interdepartmental Commission, chaired by the MoD, presented a new National Security Strategy in 2010, which was oriented on existing EU-

standards. Aiming at strengthening of the national security and the NATO collective defence, therein an involvement of “professionals, the scientific and the general public in the process of developing the strategy”⁵⁷⁰ was declared.

Based on the comprehensive risk approach, cooperation on the local, regional and state level has been defined as vital for the achievement of national interests (Samardžija et al. 2014).

Mahečić (2010) indicates that the National Security Strategy offers different tools for providing and building the necessary level of the security to Croatia, which are inter alia, an understanding of the necessity to establish cooperation within the state institutions and administrative levels as well as with international and regional counterparts, a comprehensive list of the National Security Objectives that should serve as a security policy framework for all the state institutions involved as well as the conceptualisation of pursuing the security policy.

Strategic Defence Review

The Strategic Defence Review built the basis for the practical realisation of Croatia’s National Security Strategy and Defence Strategy (NN 33/02). It provides the direction for developing the defence system and the Croatian Armed Forces to ensure the protection of vital interests of the Republic of Croatia and its citizens. Multiple risks associated with natural and man-made disasters require the contribution of defence capabilities to support civil authorities in the more serious national crisis situations. As stated in the Strategic Defence Review in 2005, the Ministry of Defence focuses mainly on four key scenarios for which effective response capabilities must be developed; these are:

- Regional Crisis with a complex threat to Croatia’s security;
- Attack on a NATO Member;
- Crisis response operation abroad under the auspices of UN, NATO or the EU;
- Natural or man-made disaster in the Republic of Croatia.

While the first two of the enumerations above were classified as low-risk and the scenario of natural and man-made disaster as medium-risk, crisis response abroad was assessed with a high-risk potential. In order to promote Croatia’s national security, the MoD participates in emergency and civil-military crisis planning, coast guard responsibilities, host nation support and multi-faceted security-related issues by inter-agency cooperation (MINISTRY OF DEFENCE 2005).

Additional National Plans of Action

Planning activities of the NPRD in the area of protection and rescue are guided by the Strategic Development Plan of the State intervention units of civil protection for the period from 2014 to 2016.

As another important policy, the National Plan of Action concerning Environmental Impacts, 2002 (NN 46/02) was adopted to determine the measures for the protection of the environment. Specific responsibilities, e.g. from the Croatian Meteorological and Hydrological service (NMHS) were defined within the chapter “Environmental protection and effective environmental management”. In a more detailed way, the roles and responsibilities at different administrative levels and of various actors were covered by the Activity Programme for the Implementation of the Special Fire Protection Measures in Republic of Croatia in 2010. Within the intervention plan during Wild and Forest Fires on the territory of the Republic of Croatia, the structure, roles, and responsibilities of relevant agencies,

⁵⁷⁰ Press release is available at: <http://www.morh.hr/en/news/press-releases/6610-national-security-strategy-draft-presented.html>; accessed: October 21, 2014.

coordination and management systems, capacity building, public information procedures, and the financial support for implementation were determined (SEERDRMP, UNDP Croatia, and UNDP 2011).

Within the Strategy of Government Programs for the period 2011-2013, an assessment of the current protection and rescue systems conclude, that cooperation shall be improved. Therein, the further development of the GIS system by an integration of the 112 system was set on the agenda.

A quite important framework was defined within the Strategy of Government Programmes for 2010-2012, wherein the disaster management was considered as a part of a general concern and a definition of the organisational principle of the protection and rescue system over all involved actors was provided (World Meteorological Organization 2012).

As identified by Perešin (2013), the “Strategic Plan of the Ministry of the Interior and Other Institutions in Function of the Protection and Rescue for the Period of 2012-2014” is a relevant document, which is based on an overarching comprehension of public security. It implicates strategic measures to deal with criminal acts, accidents as well as with natural disasters – all types of hazards, which may threaten the human life, the personal integrity, the public safety, etc.

In the frame of the Strategy of Government Programmes and State Budget for the period 2010-2012, the overall budget for the protection and rescue system was laid down. Furthermore, it determines the budgetary sources of the different administrative levels and ministerial departments (Samardžija et al. 2014). The direction of the rescue and protection system in the Republic of Croatia based on the Program for Equipping and Technical Development of the National Protection and Rescue Directorate until 2009.

2.2 General crisis (emergency, disaster) management law

According to IPA CivilProtection 2014 the following acts are of major relevance for the protection against disasters in Croatia:

- Protection and Rescue Act.
- Fire-Fighting Act.
- Act on Protection against Natural Disasters.

The Protection and Rescue Act (Protection and Rescue Act, 2004) is the primary legal source for regulating civil protection. The Protection and Rescue Act provides a definition of the protection and rescue system, including, amongst others, the tasks of the command and coordination bodies, the activities of the operational communication centre – 112 and provisions for international cooperation (IPA CP Cooperation Programme II 2012). Within the Protection and Rescue Act, various threats have been addressed and the distribution of competences in the management of threats suggests an individual focus on specific hazards by each responsible body. “The Act on Protection Against Natural Disasters defines the term natural disaster and provides the basis for protective measures, the rights and duties of protection officers, evaluates damage and details how to assist affected areas” (Swedish Civil Contingencies Agency 2009). It is supplemented by other laws related to the certain areas of critical infrastructure protection, the mountain rescue (Borić 2014), protection against natural disasters, the organizing element of the fire brigades and fire protection. As described in KMS (2014), the law regulates the following issues:

- System of protection and rescue of citizens, goods and property in disasters and major accidents;

- Management and coordination of protection and rescue activities;
- Rights, obligations, specific training and general education of participants in protection and rescue activities;
- Tasks and the structure of protection and rescue authorities;
- The way to alert and warn;
- Guidelines for mobilisation of protection and rescue.

In 2007, the Act on Protection and Rescue was harmonized in order to address the SEVESO II Directive. Additionally, more specific legal acts and plans, focusing on specific threats like floods, major fires, transport accidents and ionizing radiation, etc., have been developed to regulate the protection procedure in specific cases, e.g. firefighting, protecting humans in mountain areas, protection and rescue measures in accidents and transportation with dangerous substances. At the community level, extra plans for protection and rescue measures in municipalities, cities and the state are available (Swedish Civil Contingencies Agency 2009). Within the Act of Protection and Rescue, the principles of solidarity and self-responsibility encourage citizens to carry out measures of personal and mutual protection against threats and the consequences of disasters.

Furthermore, the planning and financing of the system of protection and rescue is regulated by Articles 40 and 41 of the Protection and Rescue Act (NN 174/04, 79/07, 38/09). Protection and rescue plans at the national level are part of the Croatian Defence Plan, and they incorporate all existing national plans for different types of threats. Plans also establish material, technical resources and sources of funding proposed activities (Samardžija et al. 2014).

- Ordinance on the methodology for making threat assessments and protection and rescue plans (NN 30/14 and 67/14)

As general rules for protection and rescue, the “Regulations on the mobilization and action of operational and rescue forces” (NN 40/08, 44/08) regulate the deployment of operational and rescue forces for protection and rescue activities.

The list of important laws regarding Civil Protection can be extended by the following ones:

- Act on Critical Infrastructures (NN 56/13);
- Act on Radiological and Nuclear Safety, 2010 (NN 28/10);
- Decision on determining the sector from which the central administrative authorities identify national critical infrastructure and lists the order of the sectors of critical infrastructure (NN 108/13).

Regarding the level of the European Union, the following regulations have an effect on Croatia’s disaster management (World Meteorological Organization 2012):

- European Flood Directive on the Assessment and Management of Flood Risks, 2007 (2007/60/EC);
- Council Directive on the freedom of access to information on the environment, 1990 (90/313/EEC).

At the international level, Croatia signed the following relevant treaties:

- Law on Ratification of the United Nations Framework Convention on Climate Change, 1992
- Kyoto Protocol to the Convention on Climate Change, 1999
- Law on Ratification of the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa – Convention to

- Combat Desertification (Paris 1994);
- Cooperation Agreement with WMO, International Civil Aviation Organization (ICAO), and EUMETSAT
- Cooperation Agreement with ECMWF, EUMETNET and Economic Interest Grouping of the National Meteorological Services of the European Economic Area (ECOMET)

2.3 Emergency rule

“The President, as the supreme commander of the armed forces, declares a state of emergency. He is responsible for the defence of the country's independence and territorial integrity” (Inter-Parliamentary Union 2013).

As declared within the Constitution of the Republic of Croatia (NN 85/10):

The President of the Republic shall pass decrees with the force of law and take emergency measures in the event of a state of war or an immediate danger to the independence and unity of the Republic, or when government bodies are prevented from regularly performing constitutional duties. During the time the President of the Republic is making use of such powers, the House of Representatives may not be dissolved. The President of the Republic shall submit decrees with the force of law for approval to the Chamber of Representatives as soon as the Parliament is in a position to meet.

From a practical view, the NPRD can propose a declaration of a state of emergency to the Croatian Government. Samardžija et al. (2014) indicated, that Act on Protection and Rescue (Art. 53) envisages the mobilisation of citizens, temporary detraction vehicles, temporary restriction of property rights, etc. by a competent civil servant of the NPRD. The constitution determines the deployment of the Croatian Armed Forces to assist firefighting and rescue operations, surveillance and protection at sea.

As laid down in Art. 17 of the Constitution, the Parliament decides by a two-thirds majority of all its members or, if it is unable to meet, at the proposal of the government with the counter-signature of the Prime Minister, by the President, that during a state of war or an immediate threat to the independence and unity of the state, or in the event of severe natural disasters “fundamental freedoms and human rights can be restricted to the extent strictly required by the exigencies of the situation and cannot result in the inequality of persons due to race, colour, sex, language, religion, national or social origin” (European Commission for Democracy through Law 1995). Despite the state of emergency, fundamental human rights, such as the right to life, the right not to be subjected to torture, etc. will not be restricted or derogated from. As clarified by the Inter-Parliamentary Union (2013), “the extent of these restrictions must be proportional to the nature of the emergency and cannot lead to unequal treatment of individuals. The work of the parliament is continued under these circumstances, in accordance with the regulations laid down by the Constitution.”

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The establishment of National Protection and Rescue Directorate is based on the Act on the Amendments to the Act on the Organization and Scope of Responsibilities of Ministries and National Administrative Organizations (NN 30/04).

The involvement of the staff of the NPRD is regulated by the “Regulations on uniform members of operational and rescue forces of the National Protection and Rescue Directorate (NN 81/09, 115/10) and in general, the “Regulation on the internal organization of the National Protection and Rescue Directorate” (NN 43/12 and 125/14) determines the working principle of the NPRD. Cooperation between specific agencies is regulated by the “Ordinance on the method of cooperation authorized persons Coast Guard and the National Protection and Rescue and the method of exchange of information necessary for their effective and concerted action (NN 40/09).

As stated by the Swedish Civil Contingencies Agency (2009), aside from the MoI, also the MoD, the Ministry of the Sea, Transport and Infrastructure, the Ministry of Agriculture, Forestry and Water Management, the Ministry of Environmental Protection, Physical Planning and Construction as well as the Ministry of Health and Social Care take part in Civil emergency planning. Exemplary, the Strategy of National Security and the Strategy of Defence have been mentioned as inter-ministerial cross-cutting issues (IPA CP Cooperation Programme II 2014). Due to the fact, that security issues are interconnected, at least coordination between the MoI and the MoD is required.

The following laws mainly regulate the military-related cooperation in protection and rescue activities:

- The Defence Law (NN 33/02);
- Ordinance on the organization, manning, and equipping forces and civil defence units for alerting (NN 111/07).

The Constitution of the Republic of Croatia specifies in Art. 7, that armed forces can be deployed to support the police and other state bodies in the face of a threat posed by nature, in fire-fighting as well as in rescue operations.

Moreover, coordination is necessary with the Ministry of Health and Social Welfare, which is responsible for health issues in national disasters. The Health Care Act, aiming on the protection of health of the population, regulates inter alia the provision of health care services in the MoD and the CAF (WHO 2012).

The participation of state intervention units of Civil Protection is regulated as follows:

- Decision on the Establishment of the State intervention units of civil protection;
- Strategic Development Plan of the State intervention units of civil protection for the period from 2014 to 2016;
- Law on Participation of the Croatian Armed Forces, police, civil defence, civil servants and employees in peacekeeping operations and other activities abroad (NN 33/02, 92/02);
- Police Act (NN 129/00, NN 41/08).

Additionally, the “Ordinance on the organization, equipping, training, start-up and mode of action of the intervention of fire brigades and reimburse the costs of their activities (NN 31/11)” specifies the principles of deployment of the fire brigades in Croatia. As explained at the Vademecum-Website

(2014), the envisaged participation of the private sector in protection and rescue measures and related rights and obligations of individual protection, as well as threat assessment and Protection & Rescue Plans are defined by the Protection and Rescue Act and supporting legislation.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The Constitution of the Republic of Croatia determines three levels of responsibilities for Protection and Rescue (KMS 2014). Apart from the state level, measures aiming at emergency and disaster management are located at the local and regional level.

The Act on Community Level, Local and Regional Self-Government defines the responsibility of the county prefects at the county level as well as the competencies of the mayors of the towns or municipalities at the local level. Article 135 emphasises the duties of local self-governments (municipalities) in the area of fire protection and civil defence. It was emphasised by the Croatian Fire-fighting Association (2011) that professional and volunteer fire-fighters are equal regarding the fulfilling their duties. However, the professional fire-fighting units work on basis of the Law of Public Institutions while the volunteer fire-fighting units operate on the basis of the Law of Associations of Citizens. Additional 4 fire-fighting intervention-units work in four coastal counties in Dalmatia, and all fire-fighting units are commanded during the summer by the Centre in Divulje near Split, which are part of the National Directorate for protection and safety.

In addition, the decisions below provide guidelines of protection and rescue for the regional and local level.

- The decision on the appointment of the Mayor, Deputy Mayor and members of the Headquarters of protection and rescue the Croatian (NN 53/12);
- The decision on dismissal of a deputy mayor and a part of the Headquarters of protection and rescue the Croatian (NN 99/12);
- The decision on the appointment of Deputy Chief and part of the Headquarters of protection and rescue the Croatian (NN 99/12);
- The decision on the appointment of members of the Headquarters of protection and rescue the Croatian (NN 67/14);
- The decision on the appointment of a member of the Headquarters of protection and rescue the Croatian (NN 143/14);
- The decision on dismissal of members of the Headquarters of protection and rescue the Croatian (NN 143/14).

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

There are several regulations concerning the organisation, attendance, recruitment and the use of units, services and bodies for managing and organising civil protection in Croatia (Swedish Civil Contingencies Agency 2009). In general, the Protection and Rescue Act regulates the involvement of volunteers and NGOs, regarding the rights and obligations of volunteers in the area of protection and rescue and agreements on protection and rescue cooperation between the NPRD and the voluntary associations (Tomin and Barbera 2011).

The legislative framework for the deployment of complementary protection and rescue services is regulated by the following acts:

- Law on the Croatian Mountain Rescue Service (NN 79/06).

The Protection and Rescue Act also regulate the deployment of the Croatian Mountain Rescue Service operations.

- Law on the Croatian Red Cross (NN 71/10).

The European Volunteer Centre (2012) indicated that due to a research lack, the percentage of people declaring engagement in volunteering activities varies from 5 percent to more than 40 percent. Despite the inconsistencies, a positive trend towards volunteering can be stated.

In 2007, the Parliament of the Republic of Croatia adopted the Law on Volunteering (NN 58/07), which facilitates the involvement of volunteers at the local and national level by providing “a definition of volunteering, principles and conditions for volunteering, the rights and obligations of volunteers and volunteer implementing organisations, the conditions for conclusion of volunteering contracts, the adoption of a Code of Ethics for volunteers, the issuing of a volunteering certificate, a national volunteer award as well as means for supervising the implementation of this law.”

Within the report of the European Volunteer Centre (2012), the following framework was identified:

- Volunteering legislation and a regulatory framework;
- Government policies on volunteering;
- Organisers of volunteering activities: organisations and networks at local, regional and national level; local/regional/national institutions;
- Volunteering centres and the Croatian network of volunteer centres;
- Volunteering opportunities and brokering mechanisms between (potential) volunteers and volunteering opportunities, including on-line placement databases;
- Volunteering promotion and raising public awareness of the value of volunteering;
- Funding to ensure volunteering programs sustainability;
- Academic and civil society organisations (CSO) research projects.

The Ministry of Social Policy and Youth is responsible for the implementation of the law. Its implementation will be ensured by monitoring the implementation of the law and collecting feedback from the implementing organisations about the consequences of its implementation. The ministry provides an annual budget of around EUR 128,500 for volunteering.

Furthermore, within the National Strategy for the Creation of an Enabling Environment for Civil Society Development 2006-2011 and its Operational Implementation Plan, basic guidelines for the volunteer development were defined to improve the existing legal, financial and institutional mechanisms, to support civil society development and to achieve the enabling environment for civil society development in Croatia.

Regarding the liability of first responders in an emergency, it was determined in Art. 1047 of the Civil Obligations Act (NN 35/05, 41/08 and 125/11), “if damage is a result of performing an act of public interest for which an approval has been obtained from the competent authority, only a compensation for damage exceeding the usual limits may be required (excessive damage). In that case, however, socially justifiable measures with the aim of preventing the occurrence of damage or reducing the damage may be requested.”

2.7 Legal regulations for international engagements of first responders and crisis managers

As explained by the IPA CP Cooperation Programme II (2012), the status of personnel of bilateral partners is clarified in the bilateral agreements. “The Prime Minister gives the final word on behalf of the whole Government regarding the request for international assistance. He/she has the right to make the decision alone, but he is usually advised by the NPRD General Director and the national headquarters.” It is not considered for the personnel of other international relief actors. This also applies for issues concerning the liability for damage caused by relief personnel.

An international cooperation between the NPRD and equivalent authorities is built upon agreements on the bilateral, regional and international level (NPRD 2014a). International treaties on cooperation in the field of protection from disasters are signed with the following contracting parties.

- Republic of Hungary;
- Republic of Slovenia;
- Bosnia and Herzegovina;
- Slovak Republic;
- Republic of Macedonia;
- Republic of Albania;
- Republic of Montenegro;
- Republic of Poland;
- Republic of Austria;
- French Republic;
- Russian Federation.

Memorandums of Understandings have been signed with:

- European Union (Community Mechanism for Civil PROTECTION; FINANCIAL INSTRUMENT CIVIL PROTECTION);
- Memorandum of Understanding on the Institutional Framework Initiative for Preparedness and Prevention disaster for South Eastern Europe.

In detail, regional cooperation was decided in the frame of:

- DPPI (the Disaster Preparedness and Prevention Initiative);
- SEDM (the South-East Europe Defence Ministerial);
- CMEP SEE (Civil Military Emergency Preparedness South Eastern Europe).

Specific regulations exist in order to guide the engagement in mutual assistance across borders, which are listed below.

- Regulation on the amount of compensation to persons engaged in the protection and rescue outside the Croatian borders (NN 90/06);
- Regulation on the procedure of crossing the border when receiving or sending urgent assistance in protection and rescue (NN 52/06);
- Regulation on the definition of compensation for temporarily seized movable property, to implement measures for protection and rescue (NN 85/06);
- Regulations on the participation of members of operational and rescue forces in the activities of forces for immediate aid in disasters abroad (NN 73/06);

- Law on Participation of the Croatian Armed Forces, police, civil defence, civil servants and employees in peacekeeping operations and other activities abroad (NN 33/02, 92/02).

Furthermore, a SOP was prepared for the coordination between national authorities while sending/receiving international assistance in emergency situations, which determines the responsibilities of all participants, the communication and coordination lines in between them as well as the specific procedures for sending, receiving and “processing” transiting international assistance. The coordination structure in case international teams are also present in the operations is covered by these SOPs (IPA CP Cooperation Programme II 2012). Additionally, an extra SOP for the provision of cross-border assistance in extinguishing the fire of open space between Croatia and Bosnia & Herzegovina exist.

The Decree on crossing national border while sending/receiving international assistance in emergency situations (adopted in 2006) builds the basis for the deployment of forces abroad (IPA CP Cooperation Programme II 2012). As an example, it determines that

“Visas can be issued expeditiously, exceptionally even at border crossing points. Customs duties and related fees are waived for the relief items and for the equipment of international intervention teams, provided that all items are well documented. As entry is always facilitated by a representative of NPRD (or of its local office), the likelihood of any misconduct or violation of these rules are practically non - existent.”

There is no additional certification procedure for foreign disaster relief personnel. Medical personnel can provide basic healthcare, especially if they are part of a certified USAR team (IPA CP Cooperation Programme II 2012). The national headquarter is responsible for issues regarding the operations and logistics of assisting international teams. As further explained within the Analytical Study on Host Nation Support (2012), should an OSOCC eventually be established, it shall deal with the request via the liaison officer “assigned to it. To provide logistical services for national intervention teams, standard procedures are in place, whose application may be extended to international teams, too, if feasible.” “Although, there are no restrictions concerning the import of emergency equipment, the use of own radio frequencies is prohibited, because it may cause interferences with the frequencies of national authorities.”⁵⁷¹ Croatia determines free frequencies for international disaster relief teams, which can be distributed in case of need. In the responsibility of a Host Nation, Croatia takes to care for the security and safety of relief personnel, their equipment and relief consignments. In a case of security constraints, security advice is provided by the representative of the police in the national headquarter (IPA CP Cooperation Programme II 2012).

In the past, Croatia rendered assistance to several disaster-affected nations upon request. These were in the case of forest fires in Montenegro in 2002, fires in Bosnia and Herzegovina, Macedonia and Greece in 2007, forest fires in Israel and Bosnia and Herzegovina in 2010, floods in Slovakia in 2006, floods in Hungary in 2010, floods in Albania in 2011 and severe weather conditions in Montenegro in 2012 (NPRD 2014a). The provision of assistance to Hungary, Bosnia and Herzegovina, Greece was organised by the NPRD as the Croatian contact point for the EU Mechanism (Austrian Red Cross 2014).

⁵⁷¹ <http://www.gpo.gov/fdsys/pkg/CFR-2001-title7-vol1/xml/CFR-2001-title7-vol1.xml>

3 Organisation

3.1 Organisational chart

The Law on Protection and Rescue defines three levels of responsibilities for the area of Civil Protection. As illustrated in Figure 74, these are the level of the state, the counties and the municipalities or towns.

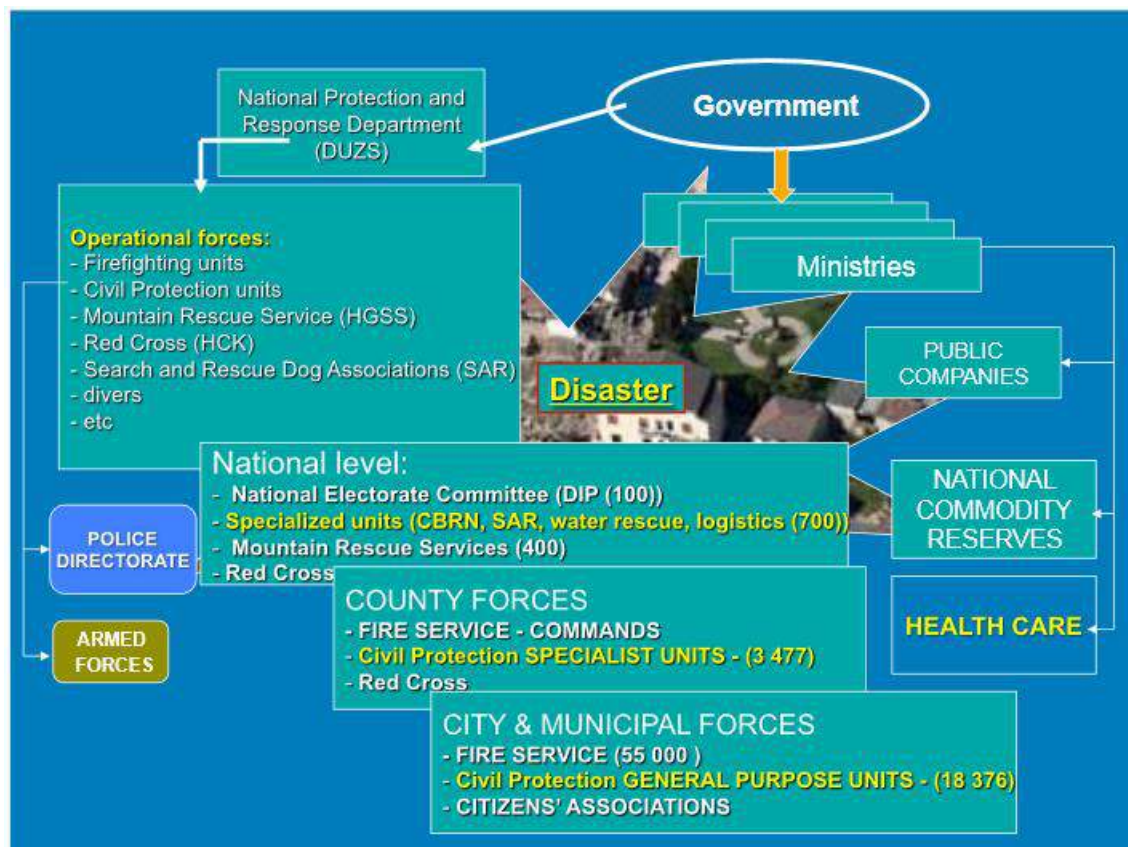


Figure 74: Organisation of emergency response in Croatia (WHO, 2012)

Authorities at the level of regional and local self-governments participate in the implementation of guidelines to ensure the functioning of the protection and rescue system in their area of competence. Furthermore, they are responsible for financing the protection and rescue system at the spatial level concerned. Additionally, regional and local authorities take part in drafting protection and rescue plans, adopt threat assessments and pass general acts for the management of operational forces (IPA CP Cooperation Programme II 2014).

Municipalities and towns are mandated to mobilise all available human and material resources in order to respond to a disaster in their territory. Since the event overwhelms the capacities at the local level, assistance from county level by contacting its prefect can be requested. The county is responsible for the mobilisation of resources within its territory until its capacities are insufficient. After a request for help at the state level, the NPRD assumes the overall coordination and organises response with support from its subordinate departments.

As defined by the NPRD (2014b), in the event of disasters, major accidents and accidents with dangerous goods on Croatian territory the provision of direct technical assistance, additional capabilities and resources will be ensured by these units. Organised as the operative force for specialist tasks of protection and rescue, they will become mainly active in the field of CBRN, Search and Rescue (SAR), water rescue and logistics. Furthermore, they take part in planning, operational and technical issues related to the preparation and achievement of full operational readiness, equipment and training. In general, a state intervention unit of Civil Protection is composed of professionals and reservists. While professionals primarily fulfil duties related to the establishment of state intervention units of Civil Protection, drafting proposals of development plans, deploying staff and material/technical resources, planning the preparation and implementation of training programs and participate in the planning, organisation and implementation of these exercise, reservist monitors the development of new technologies, equipment and resources, methods and procedures in the protection and rescue and proposes their practical introduction into operational use (NPRD 2014b).

An important agency is the National Headquarter for search and rescue at sea is under the jurisdiction of the governmental coordination. It hosts 48 vessels of the Ministry of Maritime Affairs, Transport and Infrastructure, 38 vessels of the Ministry of the Interior and the air units of the Ministry of the Interior as well as of the Ministry of Defence. However, in a case of need a conveyance, environmental units and privately owned vessels or airplanes might be included.

Additionally, the National headquarter for search and rescue at sea has the competence to organize relief operations, i.e. search and rescue at the sea. Both key players are supported by police forces and build the core structure of the Croatian disaster management. As the main legal document, the Law on Protection and Rescue regulates the disaster management, which is supplemented by other laws related to the certain areas of critical infrastructure protection, the mountain rescue (Borić 2014), protection against natural disasters, the organising element of the fire brigades and fire protection. The national coordinating body for the all-hazards approach is also the NPRD while relevant services and institutions established by the government participate in preparation and implementation of protection and rescue activities and measures. The system is on the operational level subdivided into agencies that cope with specific threat types such as floods, wildfires, mountain rescue and protection, etc. In a case of multidimensional incidents, cross-sector coordination is ensured by the NPRD (Samardžija et al. 2014).

In the case of major accidents and disasters, the NPRD has the following duties (NPRD 2014a):

- Establishing mandatory guidelines for the management guidelines for risk management and rescue;
- Implementing the mobilisation of departments and units of the board and the operational and rescue forces;
- Coordinating, managing and directing operational command of forces in disasters and major accidents;
- Directing and coordinates the activity of operational forces in the field of protection and rescue;
- Performing tasks of informing and alerting the population and coordinate unique alert system in Croatia;
- Performing inspections of operational power;

- Cooperating with the competent authorities of other countries and international organisations in the protection and rescue, in order to provide and accept international assistance and joint action;
- Providing information to the public.

The NPRD stated (2014a) that the functioning of the National Protection and Rescue System in the 20 counties of Croatia is ensured by its subordinate offices at the county level. Each county has a County 112 centre and a Prevention, Planning and Inspection Department. Protection and Rescue Departments have been established in the major cities Zagreb, Rijeka, Osijek and Split, and National Intervention Units are in place in the county offices at the coast Zadar, Šibenik, Split and Dubrovnik (Radovic, Vitale, and Tchounwou 2012). The units at the county level are dedicated to provide their service in protection and rescue operations, if special skills are required, especially in the case of forest fires.

As illustrated in Figure 75, the NPRD, which is affiliated to the Ministry of Interior, comprises three divisions of imperative relevance for crisis management, namely the International Cooperation Department, the Director's Cabinet and the Internal Revision Department (Swedish Civil Contingencies Agency 2009). The strategic forefront rests on five sectors, which are focusing on specific issues of civil protection and rescue. These sectors and their tasks will be discussed below.

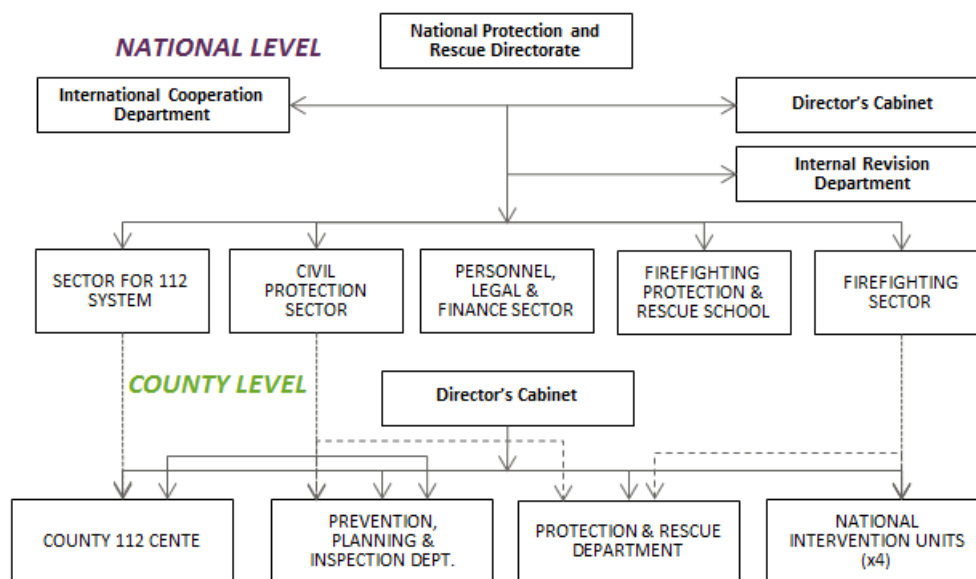


Figure 75: The Structure of the National Protection and Rescue Directorate

Available at: <http://seekms.dppi.info/national-protection-and-rescue-directorate/>; accessed: 17th September, 2014.

The Sector for the 112 System is composed of the national 112 Centre, the Prevention, Planning & Supervision Department and the Communications & IT-Department (Swedish Civil Contingencies Agency 2009). Furthermore, by acting as an operational communication service for data and information management as well as a notification service, it fulfils the duty of crisis communication and has to inform the public as well as authorities and rescue services.

The Civil Protection Sector includes two departments – the Operations & Analysis Department and the Prevention, Planning and Inspection Department. The last one directs rescue forces in the case of emergency by assuming mobilisation and coordination tasks. Furthermore, it implements prevention

measures, e.g. risk assessment, preparing SOPs, etc. and takes tactical tasks by monitoring current disasters and conducts a need assessment (Swedish Civil Contingencies Agency 2009).

In the frame of the central administration, the Firefighting, Protection and Rescue School is dedicated to prepare plans and standards, monitor training programs and provide training exercises for professional firefighters and commanders of civil protection and rescue staff. Similar to the Civil Protection Sector, the Firefighting Sector is focusing on the protection against fire by performing an assessment of the situation as well of the needs of the field staff. This Sector acts as an overarching coordination body for the fight against fires, especially if they cross county borders. In cases, which require land and air forces, the Firefighting Section works on the harmonization between the Ministry of Defence and the Ministry of the Interior to receive support of the military and/or the police (Swedish Civil Contingencies Agency 2009). Together with the MoI its tasks concerns the preparation of strategies and programs for further implementation of fire protection. Another close cooperation exists with the MoD and the Croatian Fire Fighting Association concerning the pushing forward of intervention plan for a large-scale forest fires. The National Intervention Units remain under the control of the Firefighting Sector. Additionally, a Personnel, Legal & Finance Sector has been established, which is dedicated to handle the legal, personnel and financial issues, relating to the legislation, maintain a real property database, prepare contracts, maintain books on business relations and medical insurance policies for employees (Swedish Civil Contingencies Agency 2009). There, the Legal Department, the Personnel Department, the Finance Department as well as the Department for Investments and Procurement have been integrated.

Apart from the dominating role of the independent NPRD, the protection and rescue system relies on professional firefighters, volunteers and private specialist contractors. Pursuant to the Constitution of the Republic of Croatia, professional firefighters are assigned to local authorities, which provides the financial basis for their performance (Croatian Firefighting Association 2011). If necessary, they can be deployed by the central firefighting sector.

As an important voluntary NGO, the Croatian Red Cross (CRC) is integrated in the National Protection and Rescue System at the national and local level. With its 20 branches at the level of counties and 110 branches at towns and municipalities, the CRC provides first aid, disaster preparedness and response, tracing service, health programs, water life service and humanitarian activities (NPRD and UNDP 2012).

The Croatian Rescue and Mountain Service (CRMS) is built upon twenty territorial units. As a specialized rescue service, the main areas of action are the help on rugged terrain during difficult weather conditions and in rescue scenarios, which require special equipment or know-how. A strong cooperation was established between CRMS and the police, the Croatian Armed Forces and firefighters. "Croatian Mountain Rescue Service gathers the fittest Croatian rock climbers, speleologists, mountaineers and skiers, specially trained in administering of first aid and in all mountain rescue techniques, including helicopter-aided rescuing and search parties in rugged terrain involving the use of rescue dogs. Croatian Mountain Rescue Service has around 500 members, including 25 medical doctors and 12 instructors."⁵⁷² In addition, the CMRS is providing first aid to people injured in rugged areas and fosters education and prevention, especially of mountaineering related accidents. Additionally, specialised diving associations, rescue dog services and amateur radio organisations play a role in the protection and rescue system (Samardžija et al. 2014).

⁵⁷² <http://www.hgsszd.hr/en/o-nama/>

Private specialist contractors, which are designated to perform protection and rescue activities in their everyday business as well as citizens' associations whose activities are complementary to protection and rescue measures are engaged on the basis of public-private partnership (European Commission 2014). Especially, in the area of disaster risk reduction, ICT companies contribute to the warning and disaster response system (SEERDRMP, UNDP Croatia, and UNDP 2011).

At the level of ministries and agencies, the Central State Administration Authorities contribute to the efficient functioning of protection and rescue systems by planning and allocating resources and equipment for protection and rescue needs, collaborate in threat assessment with the NPRD (in the area of their competence) and ensure an appropriate competence level of staff to undertake measures and activities necessary for efficiently carrying out the services of a central state government authority in disaster and major accident situations (European Commission 2014). The Meteorological and Hydrological Service of Croatia (NHMS) is a national centre of excellence based on high standards. Their tasks include the support to economic development, environmental protection, measures for the preservation of life and material goods from natural hazards and related mitigation measures as well as monitoring and observation of hydro-meteorological phenomena (SEERDRMAP, UNDP Croatia, and UNDP 2011).

Charged with the maintenance and deployment of the network of seismographs and other instruments and collecting, analysing and archiving of seismological data, the Croatian Seismology Survey, which is part of the Geophysical Institute of the Faculty of Science and Mathematics of the University of Zagreb. Also research on earthquake related issues are one of their key competences.

Croatian Waters is responsible for the monitoring of water flow and water level prediction, while the River Section Director for Flood Protection is the competent authority to declare the beginning and the end of the both regular and emergency protection. Strong cooperation exists between Croatian Waters and DHMZ in order to provide "high-quality controlled national and international hydrological data in near real time in agreed format" (SEERDRMP, UNDP Croatia, and UNDP 2011).

The Croatian Mine Action Centre (CROMAC) is responsible for research on and improvement of mine action techniques, technology and methods, testing of machines, mine detection dogs and handlers, testing and field evaluation of modern technologies, education and expert assistance to the countries in the region and beyond.⁵⁷³

As regulated by appropriate laws (e.g. Act on Defence), assistance from police forces and the Croatian Armed Forces can be requested in the case of major disasters.

The General Police Directorate is managed by the General Police Director and have to fulfil tasks in the area of:⁵⁷⁴

- Monitoring and analysing the state of security and developments leading to the emergence;
- Harmonisation, guidance and supervision over the work of Police Directorates and Police Administrations;
- Immediate support in particular more complex operations of Police Directorates and Police Administrations;

⁵⁷³ Information is available at: <http://www.ctro.hr/eng/menu/about-us/article/about-us-12.html>; accessed: 11th October, 2014.

⁵⁷⁴ Information is available at: <http://www.mup.hr/1259.aspx>; accessed: 17th September, 2014.

- Contribution to the implementation of the international agreements on police cooperation and other international acts under the competence of the General Police Directorate;
- Application of standards for the equipment and technical means;
- Providing the basis for the police readiness to act in the state of emergency.

3.2 Organisational cooperation

In order to establish cooperation in the field of protection and rescue issues, the NPRD is the focal point for the appropriate counterparts in neighbouring countries as well as for international organisations (Swedish Civil Contingencies Agency 2009). As explained at the Vademecum-Website (2014), a Decree on how to receive and send urgent assistance in case of a demanding emergency situation has been issued in accordance with the Protection and Rescue Law. The Decree defines the responsibilities of the NPRD, the Border Police and Customs when international assistance is crossing the Croatian state border and the coordination between these authorities. An appropriate SOP has been developed to define the obligations of the NPRD, the Border Police, Customs, the Ministry of Defence, the Ministry of Health and Social Welfare and the Ministry of Foreign Affairs and European Integration. Furthermore, it determines the communication and coordination procedures between the involved actors. Additionally, cooperation has been established with the NATO Euro-Atlantic Disaster Response Coordination Centre (NATO-EADRCC) and the European Union Community Mechanism for Civil Protection. Coordination at the international level is provided by the Government or the NPRD as a central state administration body for this kind of events. Corresponding to that, the NPRD has been incorporated as a focal point for the International Search and Rescue Advisory Group, both for political issues and for operations (INSARAG 2014).

Regarding the probability of the simultaneous occurrence of events, the County department for Civil Protection (2014) has indicated, that the Croatian system of Protection and Rescue is based on the principle of subsidiarity, meaning that the response to possible crisis at first must be provided by the local government level, then at regional level and finally at the state level – if local capacities are not sufficient. The top priority for the action of these forces are, in any case, the saving of human lives and, secondly, the mitigation of damage to material and cultural goods. As priorities, certainly, those threats will be ranked first, which are well-known that they can turn into major accidents and disasters (Expert Interview 2014).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The County department for Civil Protection (2014) pointed out that, in Croatia, SOPs exist, but are mainly related to firefighters, CMRS and NPRD, who have developed their SOPs and are continuing on their improvement. There it was expressively stated that the NPRD is in charge for drafting plans, preparing appropriate by-laws (Swedish Civil Contingencies Agency 2009) and the launching of standard operating procedures. Due to the fact that the main actors also provide training, according to the established plans, they permanently receive feedback from a user view. It should be noted that the existence of plans at the national, as well as at the levels of local and regional governments, are mainly addressing specific threats. This will become apparent by the title of the plans, e.g. Croatia have Fire protection plans ("Firefighting and management", Flood protection plans, etc. As mentioned by Jeraj (2014), for the case of cross-border activities, Croatia and Slovenia are developing a common Standard operating procedures for fighting open space fires.

The Website of the NPRD provides a comprehensive overview on Standard Operating Procedures, concerning Civil Protection (National Protection and Rescue Directorate 2014):

- SOP for treatment of a single operative - Communication Centre 112 at the fire in the open air;
- SOP Croatia – Bosnia & Herzegovina on the provision of cross-border assistance in extinguishing the fire of open space;
- SOP to use weather forecast Meteorological and Hydrological Service;
- SOP for the operation of a single operative - Communication Centre (centre 112) - Delivered location data of users for calls from mobile telecommunications networks – AMENDMENTS;
- SOP for the operation of the single operations and communications centre 112 in case of an accident in the tunnel;
- SOP for the operation of a single operative - Communication Centre 112 in the case of search and rescue operations on the mainland or an island;
- SOP for the operation of a single operative - Communication Centre 112 in case of an accident on the highway;
- SOP for treatment of a single operative - Communication Centre 112 in case of an accident on the state, county, local and unclassified roads;
- SOP in organizing transportation for the purpose of organ transplants;
- SOP for border crossing;
- SOP for the operation of operational and rescue forces in flood;
- SOP on call emergency numbers by which operators of public communications networks Centres 112 and 112 National Centre must allow free calls.

The rulebook, developed by National Directorate for Protection and Rescue, lays down rules and means for citizen alert system, as well as procedures for citizen alert system related to the origin of a crisis, procedures during the crisis and ending the crisis.

The protocol on standard operative procedures of the Common operative and communication centre (112 Centre) defines the way of common actions of operational troops and the Common operative and communication centre (hereinafter 112 Centre), procedures for transmission of all available information related to crisis, accidents, big accidents or catastrophes after receiving information through 112 service, procedures of information analysis and forwarding to the operational troops and other participants in protection and rescue operations, as well as obligations of participants in protection and rescue operations towards 112 Centre, aiming at organised and coordinated implementation of protection and rescue operations. It includes also actions of Common operative and communication centre 112 and other participants in protection and rescue operations during firefighting actions on open space.

The Standard Operative Procedure for action of operative troops for protection and rescue during floods launched by the National Directorate for Protection and Rescue is delivered to harmonise cooperation and action of operative troops for protection and rescue, as well as rescue operations during floods, where actions should follow Plan for protection and rescue on the territory of the Republic of Croatia and other basic legislation, particularly Law on water and National plan for flood defence. By applying SOP, a maximal integration of operative capacities and their efficient implementation within the whole protection and rescue system on the territory of the Republic of Croatia will be assured.

4.2 Operations planning

In general, disaster preparedness plans and contingency plans are in place at all levels (local, regional and national) and are reviewed, supplemented and tested in practice regularly. County and local governments are responsible for the development of draft protection and rescue plans (e.g. disaster preparedness plans) for their respective administrative units. Preparedness/contingency plans are publicly available and are posted at the county and local self-government web sites (SEERDRMP, UNDP Croatia, and UNDP 2011).

4.3 Logistics support in crises

The “Rulebook on mobilisation and action of the Operational Protection and Rescue Forces (NN 40/08, 44/08), adopted by the NPRD, regulates the deployment and management of operational forces, determining their management, command and coordination during disasters (Samardžija et al. 2014). While protection and rescue headquarters are responsible for the management and command of operational forces at the local and regional level, the NPRD is the competent authority at the national level. Furthermore, the organisation in terms of recruitment, personnel and material of those units is determined by regulations of the “Rulebook on organization, recruitment and equipping of the civil protection units and alerting units” (NN 111/07), passed by the director of the NPRD. As stated by Samardžija et al. (2014) stated, according to the Law on Protection and Rescue, logistics and equipping relies on NPRD warehouses, resources of local and regional self-government units and civil organizations whose members are recruited, depending on the type of the engaged units.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

As pointed out by the United Nations Office for Disaster Risk Reduction (2009), the system of alerting authorities is based entirely on the emergency number 112. Through this system, reports and signals regarding all levels of emergencies are collected and alerts are issued.

The early warning system is a part of the NPRD and is interconnected with warning centres, monitoring stations and alarm units. Furthermore, warning centres, which act as a communication hub in times of a disaster, operates sound alarm systems. Alarm units forward information about threats to the Warning Centre and alarm the population (Republic of Croatia 2010). As stated by the County department for Civil Protection (2014), there are many ways to warn the citizens. From the simplest such as triggering an alert by sirens to the more complex as it is the use of public media. The sirens are located in the 112 Centres of the NPRD but have also been established at the local fire departments. Not all sirens of firefighters have been linked to the system 112 of NPRD. These current circumstances have been considered as a sub-optimal, because the forwarding of information, e.g. about the type of danger or the specific threat, might be later than the impact of an event affect the population. It was stated by SEERDRMP et al. (2011), the Standard Operating Procedures of the Integrated Operational-Communicational Centre (Centre 112) defines the way of common actions of operative units and Common operative and communication centre, procedures for transmission of all available information related to crisis, accidents, big accidents or catastrophes after receiving information through 112 service, procedures of information analysis and forwarding to the operational units and other participants in protection and rescue operations.

Furthermore, as obligations of participants in protection and rescue operations towards 112 Centre, which is aiming at the organised and coordinated implementation of protection and rescue operations have been defined. It includes also actions of Common operative and communication centre 112 and other participants in protection and rescue operations during fire-fighting action on open space. The communication of threats is mainly located at the Sector for 112 System, which operates at the national and county centres as a 24 hour a day – 7 days a week service. The sector comprises the national 112 Centre, the Prevention, Planning and Supervision Department and the Communications and IT Department. The tasks of the 112 Sector include the collection and processing of information as well as the notification about events.

A central data storage for the collection of real events has been established. Equipped with a public alert system, it is responsible for informing the general public as well as the legal persons, the national administration and the emergency and rescue services. Furthermore, it is dedicated to coordinate the transfer of commands and decision between various levels (Tomin and Barbera 2011). If an approaching danger has been detected by a hydro-meteorological forecasting system, warnings will be forwarded to the flood defence centres at the counties, Croatian Waters and the Main Centre of Flood Defence. The last one is responsible for notifying the NPRD and updating information about current events permanently (ICPDR 2012). According to the Government of the Republic of Croatia (2005), databases for individual risk types are maintained by risk-specific expert groups, i.e. Technical Support Centre (nuclear risk), the National Institute for Toxicology and the Information Centre of the National Oil Company, etc., which are forwarding relevant data to warning centres, the government, Civil Defence Headquarters.

5 Capabilities

5.1 Human resources

At the state level, there are a total of 540 people ordinarily employed in Civil Protection duties, consisting of public servants employed with the NPRD and staff of the 112 system. In the case of an emergency, 900 private specialist contractors and 50 professional firemen will support employees of the NPRD. The county level comprises 180 people in the Civil Protection Sector in times of peace, which are mainly employees of the 112 system. In towns and counties of Croatia, 2,300 professional firefighters and about 60,000 volunteers can be mobilised for Civil Protection in cases of disasters. This number includes personnel from the National Protection and Rescue Directorate (plus the sector for the 112 system), private specialist-contractors, professional firefighters and volunteers; in total, about 63,970 individuals could be involved for civil protection in emergency periods. This amount corresponds to approximately 2.15 percent of the national active population (United Nations Office for Disaster Risk Reduction 2009).

According to the Croatian Firefighting Association (2011), in Croatia there are 1,835 volunteer firefighting units in municipalities and towns, 56 volunteer industrial firefighting units, 61 professional public city firefighting units, 34 professional industrial firefighting units, four intervention units of the Ministry of Interior and in addition, special firefighting forces and forces of the anti-fire escadrille of the Ministry of Defence. As presented by the Croatian Parliament (2006), in 2005, the Croatian Armed Forces had a numerical size of 18,479 active military personnel.

The state intervention units consist of teams dedicated to providing measures in the area of CBRN, Search and Rescue (SAR), water rescue and logistics (NPRD 2014b). The state intervention units for the Civil Protection have total personnel of 612, which are composed of 227 members from the Departments in Zagreb, 186 from the Department Osijek and in equal shares of 197 members from Department of Rijeka and the Unit in Split. In all departments and the Unit of Split, the major part of members takes the logistic team.

As already stated by Samardžija et al. (2014), the Croatian civil protection system strongly relies on volunteers which play an important role in all aspects. As illustrated in Table 21, without the contribution of police forces, about 90,402 personnel may participate actively in the case of an emergency. The result of this evaluation is more recent compared to the one provided by (United Nations Office for Disaster Risk Reduction 2009) at the beginning of this section. Moreover, it includes about 18,500 members of the Croatian army, therefore these numbers cannot be compared directly.

Table 21: Overview on operational forces for protection and rescue activities in Croatia

Stakeholder Type	Name	Number of Personnel
Voluntary Organisation	Croatian Mountain Search and Rescue Service	~ 750
	Croatian Red Cross	8,852
	Volunteer fire-fighting units of towns and municipalities	56,415
	Volunteer fire-fighters of industrial fire-fighting	1,621

	units	
	Professional fire-fighters in volunteer fire-fighting units	236
	Professional industrial fire-fighters	778
	Professional fire-fighters of public fire-fighting units	2,371
Agency/Department	Croatian Armed Forces	18,479
	Police	unknown
Private business	Private specialist contractors	900
Total		90,402

In Croatia, civil protection forces will be trained on the basis of a regular system of training and courses (European Commission 2014). For the needs of civil protection, the training through a regular system of education is being performed by enlisting adequate programs in the curriculum of elementary schools, and a three-year specialist training for the vocation of fireman. Even so, most of the training is maintained through specialist courses, which are being performed in combination, through centralisation or decentralisation, at the state level or at the local self-government level and administration.

5.2 Materiel (non-financial) resources

In Croatia, protection and rescue plans at each administrative level determine the appropriate material and technical means used in the event of a crisis (Expert Interview 2014). Furthermore, it has been stated that there are plans in Croatia to use some military resources when they are needed. Protection and Rescue Plans define what kind of legal and natural persons in the sphere of local and regional governments will be entrusted with tasks to conduct certain activities in the case of disasters and major accidents. The County Department for Civil Protection (2014) has named as examples the PP NOS firefighting planes in the case of large forest fires and the helicopters for emergency medical flights and rescuing victims from inaccessible areas.

As stated by the Croatian Firefighting Association (2011), the participation of special firefighting forces and forces of the anti-fire escadrille of the Ministry of Defence involves, if necessary, the provision of the following special assets:

- 6 Canadair CL 415;
- 6 Air-tractors 802 A Fire Boss;
- Helicopters of the type Mi-8 and 117-Š of the Croatian army.

In the period of 2003-2009, 210 fire-vehicles and a firefighting robot, produced by DOK-ING Company, were acquired. There are the following types of vehicles available at the firefighting units in Croatia.⁵⁷⁵

- Attack vehicles;
- Water tankers;

⁵⁷⁵ Information is available at: <http://www.firegeezzer.com/2011/05/20/the-croatian-fire-service-then-and-now-part-2/>; accessed: 19th October, 2014.

- Chemical vehicles;
- Technical vehicles;
- Turntable ladders;
- Forest vehicles;
- Command vehicles;
- Other vehicles (used for some special purpose like transport of equipment or personal, industrial fire-fighting, aero ports, tunnels etc.).

Within the National Report for the WDRC, the Croatia Government stated (2005), that at the national level, the Directorate for Strategic Commodity Stockpiles and the Ministry for Economic Affairs, Labour and Entrepreneurship are responsible for stockpiles of food, energy and equipment.

As stated by the Croatian Red Cross, the required “equipment is procured and stockpiled in the central warehouse in Zagreb and in regional warehouses.”⁵⁷⁶

The Law on Strategic Commodity Stockpiles, 2002 (NN 87/02) determines the holding of emergency stockpiles, its financing and their facilitation. As defined by the law, in the event of major natural disasters and technical/technological and ecological disasters, agricultural products, foods and non-food products, oil products, materials and raw materials for production should be available at stock.

In Croatia, companies operate storage facilities for commodity reserves. HANDA, an entity under Public Law, is responsible to form the state compulsory oil stocks at the level of a 90-day-consumption by 31st July 2012, in line with EU directives.

According to the report of the Petroleum Development Consultant Limited & Energetski Institut Hrvoje Požar (2011), in Croatia the following emergency stock was held in 2010 (see Table 22).

Table 22: Overview on current emergency stock holding in Croatia

Type	Stock (tonnes) held by HANDA, July 2010	Stock (tonnes) held by industry, July 2010
Crude oil	293,043	48,084
Motor gasoil	30,000	10,720
Diesel	25,000	23,920
Jet fuel	0	900
Gas oil	0	4,752
Fuel oil	35,000	7,725

5.3 Training

The Firefighting and Protection and Rescue School of the NPRD offers response-oriented specialist courses and trains professional firemen and protection and rescue forces (command headquarters, unit commanders, shelter managers and civil protection commissioners). Training and workshops for county and local government (for mayors, senior management and other relevant staff), as well as for volunteer associations (diving associations, mountain rescue services, volunteer fire departments) are organised by the NPRD. In 2011 on average 50-360 hours of training sessions were completed at national level and 50-80 hours at local level (SEERDRMP, UNDP Croatia, and UNDP 2011). It was

⁵⁷⁶ Information is available at: <http://www.hck.hr/en/category/-disaster-preparedness-and-response-63>; accessed: 21st October 2014.

mentioned within the IPA Needs Assessment that, “Croatia extensively uses simulation exercises to validate preparedness activities and contingency planning”.

Radovic et al. (2012) emphasised that employers have an obligation to train employees in rescue and evacuation measures for the case of emergency. There are special regulations concerning the prevention, firefighting and evacuation of employees.

In the frame of an international disaster mitigation process, Croatia offers an international training program for medical response to major incidents to educators.

NMHS is conducting internal capacity building and technical training activities related to DRR, such as evaluation of the suitability of communications, workstations, and software to support DRR; forecasting of hazards including up-to-date training of new forecasting technologies and products; training on DRR processes and similar. In addition, NMHS participates in exercises and drills, e.g. “concerning nuclear accidents, floods, major traffic accidents etc. to ensure disaster preparedness. Pamphlets, brochures, posters and recorded materials are the methods and instructional materials used by the HMS to provide education and public outreach programmes”⁵⁷⁷. The UNISDR (2009) indicated, that the Firefighting Protection and Rescue School of the National Protection and Rescue Directorate maintain many cooperation in the field of Civil Protection, i.e. the United Kingdom’s Bournemouth University (courses on international disaster management) and with the Italian training centre FORMEZ (affiliated to the Presidency of the Council of Ministers). Moreover, in the frame of the Stability Pact – DPPI Croatia has stipulated a Disaster Management Training Program, which is embedded in the cooperative network for countries of South Eastern Europe. Based on a common organisation of the Croatian National Protection and Rescue Directorate and the Slovenian Administration for Civil Protection and Disaster Relief special Risk Reduction Training Courses have been offered to professionals.⁵⁷⁸ Addressing the response to specific hazard types, training sessions for specific scenarios, i.e. cave accidents, have been established, involving 150 cave rescuers from Croatia and Slovenia.

Croatia is frequently joining international and European training exercises. The country “is enhancing its national civil emergency and disaster management capabilities in cooperation with NATO and through participation in activities, organised by the Euro-Atlantic Disaster Response Coordination Centre (EADRCC). Croatia also participates in the work of the Senior Civil Emergency Planning Committee.”⁵⁷⁹ In March 2010, the NPRD representatives participated at the international rescue dog exercise in Slovenia. Republic of “Croatia has also participated in the NATO Crisis Management Exercise CMX09.”⁵⁸⁰ Furthermore, the NPRD participate in the EU Civil Protection Mechanism training programme and in the UN CADRI and DPPI DRR oriented workshops and training (SEERDRMP, UNDP Croatia, and UNDP 2011). Training sessions and other types of educational events are regularly completed in the course of bilateral and international cooperation. In cooperation with the Civil-Military Emergency Preparedness, specific disaster management related training and workshops have been attended. Some important training exercises are provided in Table 23.

⁵⁷⁷ <http://www.gripweb.org/gripweb/sites/default/files/Croatia%20Needs%20Assessment%20-%202011-10-26.doc>

⁵⁷⁸ Information is available at: http://seekms.dpri.info/cb_opp/disaster-risk-reduction-training-course/; accessed: 21st October, 2014.

⁵⁷⁹ http://www.nato.int/cps/en/natohq/topics_31803.htm

⁵⁸⁰ http://www.nato.int/cps/en/natohq/topics_31803.htm

Table 23: Overview on some international training sessions completed by Croatia in the last years⁵⁸¹

Year	Program title	Scope
2014, September	Cave Rescue Training	DPPI SEE DMTP Event ⁵⁸² Joint training of Croatia and Slovenia
2014, May	National Road Traffic Collision Extrication Challenge, Skopje, Macedonia	DPPI SEE DMTP Event Coordination exercise
2013, September	Disaster Risk Reduction Training Course	DPPI SEE Event - Disaster Management Training Program of Croatia and Slovenia
2013, September	Cave Rescue Training	DPPI SEE DMTP Event Joint training of Croatia and Slovenia
2013, June	EU TARANIS 2013	Floods
2013, May	TWIST	Tsunami
2012, May	IPA CRO-FLOODS 2012 Field Exercise	Flooding Exercise of the civil protection intervention teams from seven Western Balkan countries and several EU countries
2010	EU TEREX	Earthquake
2010, March	NATO Crisis Management Exercise - CMX 09 ⁵⁸³	Simulation exercise on political-military decision-making for crisis management
2009, September	EU Danubius 2009	Earthquake
2009	EU-SweNorEx 2009	Earthquake simulation exercise including cross-border management
2008, September	EU HUROMEX 2008	Flooding in two countries in parallel and related accidents

5.4 Procurement

5.4.1 Procurement regulation

Exercised by the Department of Procurement, the NPRD is the superordinate body for the planning and quantifying of the state's emergency reserves required for the protection and rescue. Regarding the focus of procurement, the County Department for Civil Protection (2014) has argued, on the basis of its experience, that one should go with the other – that means, equipment and training needs to be procured together.

⁵⁸¹ Information about EU-related training session is available at:

http://ec.europa.eu/echo/files/civil_protection/civil/prote/exercises.htm#2009 (last updated: 10th July, 2014); accessed: 10th August, 2014.

⁵⁸² An overview on training sessions in the frame of the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) is available at: <http://www.dppei.info/programmes-activities/dmtp>; accessed: 29th September, 2014.

⁵⁸³ Information is available at: <http://www.morh.hr/en/news/press-releases/6350-nato-crisis-management-exercise-cmx-09.html>; accessed: 10th August, 2014.

In Croatia, the goods and services have to be procured under the Law on Public Procurement, for which a compliance with EU Directives can be assumed. At the moment, in Croatia a joint/cross-border procurement is under consideration regarding equipment and training (Expert Interview 2014). It has been indicated that there have already been several meetings with an attempt to jointly apply several projects for EU funding. From the standpoint of the County Department for Civil Protection (2014), an additional legislation with regard to cross-border procurement is vitally necessary. Based on previous experiences with cross-border missions, i.e. in Bosnia & Hercegovina, some lacks, concerning differences in country-specific SOPs and deficiencies at operational fieldwork, became apparent. The unequal standard of neighbouring countries is a hindrance for an interoperable approach and thus pointed out grievances, which should be eliminated as quickly as possible. Hence, any regulation that would facilitate the procurement of goods would be more than welcome.

5.4.2 Procurement procedures

In the Republic of Croatia, the NPRD is responsible for procurement at the strategic level of the state, while at the operational level, where operational forces, i.e. Firefighters, CMRS, etc., are the main actors, each department is free to dispose their procurement on their own.

Article 1 of the REGULATION ON PUBLIC PROCUREMENT FOR DEFENCE AND SECURITY PURPOSES (NN 89/12) defined the rules, conditions and public procurement for the following issues:

- *The supply of military equipment, including any parts, components and/or subassemblies thereof,*
- *Supply of sensitive equipment, including any parts, components and/or subassemblies thereof,*
- *Works, supplies and services directly related to the equipment referred to in points 1 and 2 of this article for any and all elements of its life cycle,*
- *Works and services for specifically military purposes,*
- *Sensitive works and sensitive services.*

In the course of the procurement regulation, compliance with the Directive 2009/81/EC was given as well as with the Directives 2004/17/EC and 2004/18/EC in the fields of defence and security. The regulation refers to the Public Procurement Act and the Act on State Commission for Supervision of Public Procurement Procedure (NN 21/10).

5.5 Niche capabilities

The best performing parts of the Croatia's civil security system are well-trained and well-equipped forces, particularly in the fire-fighting (both regular and voluntary forces) and flood protection. Croatia has highly professional and operational protection and rescue capacities at the central government level (healthcare, inspections, capacities of relevant public administration bodies and crisis management related services). Their skills and knowledge are one of the crucial assets for the system. Furthermore, specialised knowledge in the area of cave rescuing was established based on

the well-established speleological science in Croatia.⁵⁸⁴ In 2013, an international conference on the issue of mountain rescuing, where more than 500 of the world's best rescuers participated, was hosted in Croatia by CRMS. The speleological expedition „Lukina jama 2010“ was the occasion for the meeting of Croatian speleologists and colleagues from Bulgaria, England, Slovakia, Czech Republic and Spain.⁵⁸⁵

Close cooperation has been established between state administration bodies, NGOs, public and private companies (Samardžija, Tišma, and Skazlić 2014). The remarkable number of volunteers (about 71,000) can be identified as an important aspect of the protection and rescue system.

Furthermore, Croatia is considered as a Centre of Excellence for the training of firefighters and coordination of response to forest fires in the countries of South Eastern Europe.

As mentioned at ReliefWeb (2009):

Croatia is widely considered as a regional leader in the South Eastern Europe, particularly, in the area of wildfires risk management and monitoring and forecasting of meteorological hazards. The Government develops multi-year plans for hazard risk management, including the Protection and Rescue Plan developed by the National Protection and Rescue Directorate (NPRD), which describe the planned activities aimed at strengthening disaster risk management functions.

Croatia is regarded as driver for research on risks and disasters in the South-East region. Due to Croatia's contribution to the harmonisation of the firefighting brigades in the countries of the region through standardisation of equipment and procedures, thus promoting the regional cooperation and collaboration in disaster risk reduction.

In the view of the County department for Civil Protection (2014), best practices and transferable elements can be found in Fire-fighting, especially airborne task forces (firefighting planes-Canadair) and rescue from hard to reach areas (CMRS).

As emphasised by Samardžija et al. (2014), based on Croatia's experience with the consequences of war, "Croatia has developed humanitarian demining capacities (physical demining, equipment, know-how, and rehabilitation of mine victims) which represent its comparative advantages in Europe and worldwide."

⁵⁸⁴ Information is available at: <http://www.croatiaweek.com/tag/croatian-mountain-rescue-service/>; accessed: 22nd September, 2014.

⁵⁸⁵ Information is available at: <http://161.53.55.11/speleo/lukina2010/index-en.html>; accessed: 21st September, 2014.

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http://www.euro.who.int/__data/assets/pdf_file/0010/167932/Croatia_report.pdf.

World Meteorological Organization. 2012. "Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs." Geneva, Switzerland. http://library.wmo.int/pmb_ged/SEEPPhaseI-FinalReport.pdf.

Expert interviews

Expert Interview. "County Department for Civil Protection." Split-Dalmatia, Croatia, November 2014.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

CYPRUS

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ATOS (Nadia Politou, Adem Yaşar Mülayim, Alejandro Afonso Spinola, Dario Ruiz)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by AIT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The republic of Cyprus consists of six administrative districts: Famagusta, Kyrenia, Larnaca, Limassol, Nicosia and Paphos.⁵⁸⁶ A district administration in "exile"⁵⁸⁷ exists on the Republic of Cyprus-controlled part of the island. The north-eastern part of the island is a self-declared state controlled by the Turkish Republic of Northern Cyprus (TRNC) and recognised only by Turkey, whereas the international community considers it as part of the Republic of Cyprus.

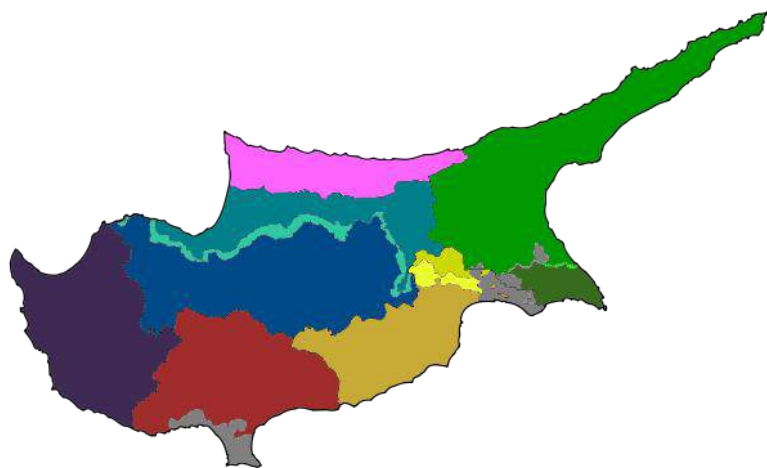









Figure 76: The Republic of Cyprus administrative divisions⁵⁸⁸

In more detail:

-  The Famagusta district, with the main town Famagusta which is the island's most important port.
-  The Kyrenia district, with the main town Kyrenia. It is the smallest district of Cyprus and the only one controlled entirely by the TRNC.
-  The Nicosia district, with the main town Nicosia (or Lefkosia) which is also the island country's capital city. The northern part of the district is controlled by the TRNC.
-  The Larnaca district, with the main town Larnaca where the island's primary airport is located. Part of the district is controlled by the TRNC.
-  The Limassol district, with the main town Limassol.
-  The Paphos district, with the main town Paphos, which is entirely controlled by the internationally recognised government of Cyprus. It is composed by four municipalities; Paphos, Yeroskipou, Peyia and Polis Chrysochous
-  The two areas in grey colour, namely Akrotiri and Dhekelia, officially named the Sovereign Base Areas of Akrotiri and Dhekelia, is a British Overseas Territory on the island of Cyprus.⁵⁸⁹

⁵⁸⁶ Cyprus, last modified on 2 February 2016, <https://en.wikipedia.org/wiki/Cyprus>

⁵⁸⁷ Government in exile, last modified on 2 February 2016, https://en.wikipedia.org/wiki/Government_in_exile

⁵⁸⁸ Cyprus, last modified on 2 February 2016, <https://en.wikipedia.org/wiki/Cyprus>

⁵⁸⁹ Akrotiri and Dhekelia, last modified on 27 January 2016, https://en.wikipedia.org/wiki/Akrotiri_and_Dhekelia

National crisis management & disaster response concept:

In Cyprus, crisis management and all emergency situations are handled by the Civil Defence, a governmental agency under the Ministry of Interior. Its main mission is to carry out various humanitarian actions intended to deal with the consequences of disasters, resulting either from natural actions (earthquake, flooding, hurricanes etc.) or from human actions (industrial accidents, armed conflicts etc.).

The members of the Civil Defence serve either at the General Directorate of Civil Defence (GD CD) or at one of the five regional managements (RMCD): Nicosia, Limassol, Larnaca, Paphos and Famagusta.

The RMCD offices operate five departments;

- Search, Rescue and Fire Fighting,
- First Aid department,
- Welfare department,
- Neighbourhood Watch department and
- Secretarial-Communications department.

Key stakeholders: Minister of Interior, GD CD, RMCDs, civil defence units (e.g. Search and rescue teams), community councils, Cyprus Red Cross, volunteers.

Financing: Other than civil protection purposes allocated to other government agencies 0.0452% of GDP is allocated for Cyprus Civil Defence/Protection organisation.

Furthermore, crisis management for Cypriots around the world is handled by the department of Crisis Management that belongs to the Ministry of Foreign Affairs. Under a crisis situation, this department is responsible for the risk evaluation and to provide recommendations on the best management and most possible actions to the Permanent Secretary of the Ministry of Foreign Affairs, such as repatriation of Cypriot citizens.

Table of Contents

CYPRUS Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	466
Overview.....	467
Table of Contents	469
List of Figures	471
List of Tables.....	471
List of Abbreviations.....	472
1 Policy	473
1.1 Risk Assessment	473
1.2 Policy and Governance	475
1.2.1 Strategy scope and focus	477
1.2.2 Monitoring and analytical support to policy making; R&D	477
1.2.3 Policy for Prevention	479
1.2.4 Policy for Preparedness	479
1.2.5 Policy for Response	479
1.2.6 Policy for Relief and Recovery	479
1.3 Financing	480
1.3.1 Investing in preparedness	480
1.3.2 Investing in consequence management	480
1.4 Policy review, Evaluation & Organisational Learning	480
1.4.1 Post-Disaster Assessment	480
1.4.2 Departmental Lessons Learned systems	481
1.4.3 Centralised (national) Lessons Learned system	481
1.4.4 International exchange for Lessons Learned	481
1.4.5 Regular policy reviews	481
1.5 Resilience	481
1.6 Information sharing and data protection	481
2 Legislation	482
2.1 Crisis (emergency, disaster) management concept.....	482
2.2 General crisis (emergency, disaster) management law	482
2.3 Emergency rule	482
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	482

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	483
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	483
2.7	Legal regulations for international engagements of first responders and crisis managers	483
3	Organisation.....	484
3.1	Organisational chart.....	484
3.2	Organisational cooperation	485
4	Procedures	487
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	487
4.2	Operations planning.....	487
4.3	Logistics support in crises	487
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	487
5	Capabilities	489
5.1	Human resources	489
5.2	Materiel (non-financial) resources	489
5.3	Training	490
5.4	Procurement	490
5.4.1	Procurement regulation	490
5.4.2	Procurement procedures	490
5.5	Niche capabilities	490
	Resources	491
	Legislative acts	491
	Other normative acts	491
	Official documents (white papers, strategies, etc.)	491
	Online resources (e.g. websites of key CM organizations)	491
	Publications	492
	Expert interviews	492

List of Figures

<i>Figure 1: The Republic of Cyprus administrative divisions</i>	467
<i>Figure 2: Frequency of disasters in Cyprus 1990 - 2014</i>	473
<i>Figure 3: Mortalities as a consequence of disasters in Cyprus 1990 - 2014</i>	474
<i>Figure 4: Economic effect of disasters in Cyprus 1990 - 2014</i>	474
<i>Figure 5: The R&D landscape of Cyprus</i>	478
<i>Figure 6: Organisational chart of the Civil Defence organisations in Cyprus</i>	484
<i>Figure 7: Cyprus civil defence organisational chart</i>	485

List of Tables

<i>Table 1: Major disasters in Cyprus.</i>	475
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List of Abbreviations

AMC	Assessment Mission Course
ECHO	EU Humanitarian Aid and Civil Protection
EU	European Union
GDCD	General Directorate of Civil Defence
NRIC	National Research and Innovation Council
RMCD	Regional Management of Civil Defence
SRC	Scientific Research Council
TRNC	Turkish Republic of Northern Cyprus

1 Policy

1.1 Risk Assessment

In Cyprus key risks and areas of concern are natural and man-made hazards, such as earthquakes, large fires, floods and marine pollution.

The Civil Defence department is the responsible authority in Cyprus for the execution of different measures for the prevention and control and management of all consequences related to natural and manmade disasters.

Cyprus has a major earthquake about every 10 years. During the 20th century there were recorded 30 incidents and 400 injured. The Paphos district is considered as a high risk area for earthquakes, where the last three major earthquakes occurred; in 1953 with 63 dead, in 1995 with 2 dead and in 1996 with no fatalities.⁵⁹⁰ Similarly, floods and tornados are quite rare with a very small number of casualties. On the other hand, technological accidents and fires, especially in periods of extreme temperature, are more common with about ten large incidents per year.⁵⁹¹

Based on the disasters recorded for Cyprus in the OFDA/CRED - International Disaster Database⁵⁹² between 1990 and 2014, the following figures demonstrate the frequency, mortality and economic effect of the disasters.

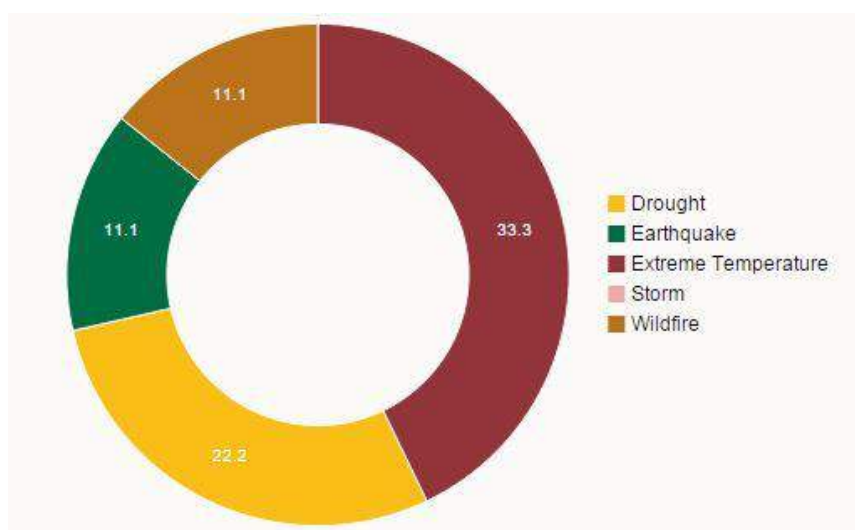


Figure 77: Frequency of disasters in Cyprus 1990 - 2014⁵⁹³

⁵⁹⁰ Cyprus Civil Defense and Disaster Management Arrangements, Accessed February 11, 2016. <http://www.cyprus-storms.net/cypruscivildefense.htm>

⁵⁹² EM-DAT (Feb. 2015) - The OFDA/CRED - International Disaster Database <http://www.emdat.be> - Université catholique de Louvain Brussels - Belgium

⁵⁹³ Cyprus: Disaster & Risk Profile, Basic Country Statistics and Indicators (2014), Accessed February 11, 2016. <http://www.preventionweb.net/countries/cyp/data/>

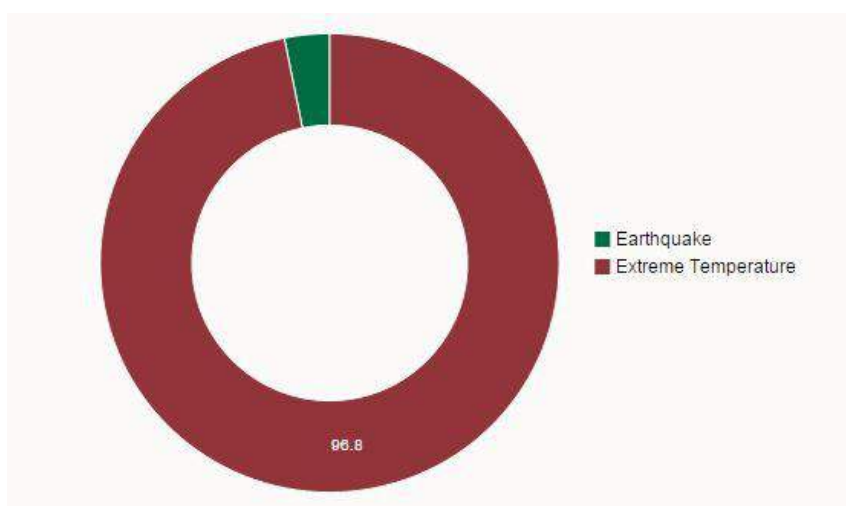


Figure 78: Mortalities as a consequence of disasters in Cyprus 1990 - 2014⁵⁹⁴

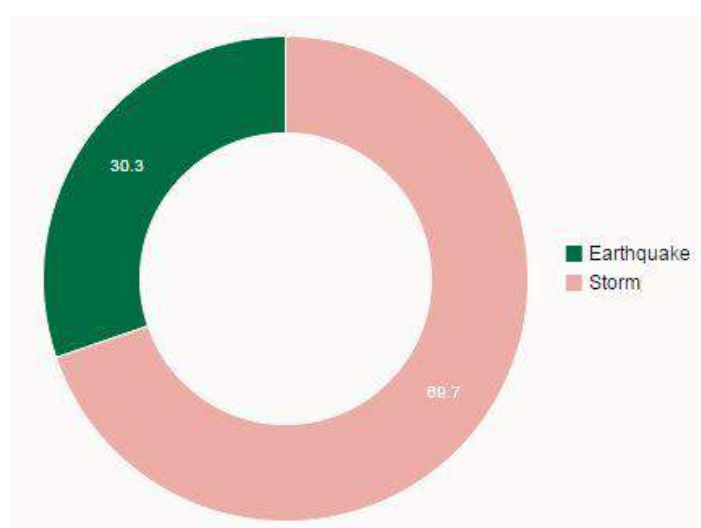


Figure 79: Economic effect of disasters in Cyprus 1990 - 2014⁵⁹⁵

The following table lists the major disasters occurred in Cyprus in the last 25 years.

⁵⁹⁴ Cyprus: Disaster & Risk Profile, Basic Country Statistics and Indicators (2014), Accessed February 11, 2016.
<http://www.preventionweb.net/countries/cyp/data/>

⁵⁹⁵ Cyprus: Disaster & Risk Profile, Basic Country Statistics and Indicators (2014), Accessed February 11, 2016.
<http://www.preventionweb.net/countries/cyp/data/>

Table 24: Major disasters in Cyprus.

Year	Disasters
2009	Tornado
2008	Forest fire
2007	Forest fire
2007	Extreme temperature, Nicosia, 4 dead
2005	Drought
2005	Transport accident, 31 dead, 8 people affected
2004	Storm, Larnaca, 10 people affected
2003	Tornado, Limassol, Larnaca, 30 people affected, estimated damage USD 10 million
2000	Wildfire, Larnaca Sud
2000	Extreme temperature, Nicosia, 5 dead, 400 people affected
2000	Drought
1998	Fire at a military base, Episkopi, 692 people affected
1998	Extreme temperature, 52 dead, 100 people affected
1996	Viral meningitis epidemic, Limassol, Larnaca, Nicosia, 280 people affected
1995	Earthquake, seismic activity and ground shaking, Paphos and Nicosia areas, 2 dead, 1865 people affected, estimated damage USD 4.34 million
1991	Drought
1983	Storm
1970	Storm
1970	Cholera epidemic
1969	Storm, Limassol, 3 dead, 3100 people affected, estimated damage USD 0.1 million
1953	Earthquake, seismic activity and ground shaking, south-west, 40 dead, 100 people affected

1.2 Policy and Governance

Cyprus has a main national plan for crisis management with the code name “Zenon”. The main objective of this basic plan is to define the framework and to provide clear instructions for the complete organisation and functioning of the state system for crises management in the peacetime, by providing detailed allocation of responsibilities and obligations of ministries and state agencies.

The basic national plan “Zenon” is the institutional framework and guide to the ministries, who use it as a bases for the design and preparation of the individual specific plans, which encode 22 different situations and scenarios, such as the case of major disasters, technological accidents, terrorist

attacks, Middle East crisis, large coastal pollution and others which fall in the responsibilities of the corresponding ministries.⁵⁹⁶

The plan considers six main threats and defines the responsibilities of the Ministries of the Government⁵⁹⁷:

- **Earthquakes** whose primary responsibility for the co-ordination of relief activities rests on the Ministry of Interior - Civil Defence Force.
- **Forest Fires** where the primary responsibility belongs to the Department of Forest of the Ministry of Agriculture, Natural Resources and Environment.
- **Rural Fires** whose responsibility lies under the Cyprus Fire Service (which belongs under the jurisdiction of the Ministry of Justice and Public Order through the Police). The Cyprus Fire Service is responsible for fighting rural fires which are up to a distance of 1km from forests boundaries. The Fire Service is also responsible for fighting urban fires and those at airports.
- **Marine Pollution** where the primary responsibility rests on the Fisheries Department of the Ministry of Agriculture, Natural Resources and Environment. An existing contingency plan establishes the necessary arrangements for the effective and timely response to a marine pollution incident. A Regional Agreement has been signed between Cyprus, Egypt, and Israel to combat major pollution accidents in the Eastern Mediterranean.
- **Radiological emergencies** where the responsibility lies to the Ministry of Labour, Social Welfare and Social Insurance.
- **War** whose responsibility lies with the Ministry of Interior - Civil Defence Force.

Some of the specific plans based on the master plan “Zenon” are listed below:

- Enceladus for earthquakes: in the first phase, a detailed analysis of all data and information is carried out so that all necessary services are mobilized. Then it is assessed whether Cyprus will need additional assistance from the EU or the UN. The second phase provides for setting up crisis and coordination centres.⁵⁹⁸
- Electra plan on preparedness and response on extraordinary Radiological or Nuclear Incidents that might affect a large population.⁵⁹⁹
- Estia plan that involves the mass evacuation and repatriation of citizens via Cyprus from the Middle East region, with the participation of thirteen more countries (Australia, Austria, Belgium, France, Germany, Denmark, Spain, Italy, Canada, UK, USA, Norway and The Netherlands).
- SEVESO plan, for the crisis management in the event of a major technological incident, based on the implementation of the European Directive “SEVESO”.⁶⁰⁰
- Ifestos plan, for the crisis management in the event of forest fires.⁶⁰¹

⁵⁹⁶ Minister of Defense: Cyprus a country standard for crisis management, Accessed February 11, 2016. <http://www.sigmalive.com/news/politics/72963/yp-amynas-i-kypros-xoraprotypo-gia-diaxeirisi-kriseon#.dpuf>

⁵⁹⁷ Booz & Company, Stock-taking of existing critical infrastructure protection activities, European Commission, October 2009

⁵⁹⁸ Chrisostomou K., Seismic Protection of Cyprus, October 2009.

⁵⁹⁹ Ministry of Labour, Social Welfare and Social Insurance, Special National plan “Electra” for preparedness and response in extraordinary radiological and nuclear incidents. 2015.

⁶⁰⁰ Fire Service Union Officers. Implementation of the European Directive “SEVESO” in Cyprus. Definition of measures and conditions to address risks of major accidents in establishments or plants due to the existence of hazardous substances. April 2015.

- National health plan, in order to ensure a health system of the country that is human-centred, emphasizing the prevention and aims at strengthening social contribution through continuous upgrading service with professionalism and respect, equal rights for all citizens.⁶⁰²

1.2.1 Strategy scope and focus

The Civil Defence in Cyprus is taking preparedness measures in response to natural or man-made disasters, the size of which can be dangerous for the life and welfare of the civilians or may cause extensive damage to the environment and the natural resources of the Republic. These measures include a series of actions for prevention, preparation, response, design, education and mitigation of disasters. As a Civil Defence force, its mission extends beyond to what is usually encompassed in civil protection priorities, so as to also include the protection and relief of non-combatant populations during military clashes, and the preservation to the maximum possible of morale and order. They cover a wide range of afflictions and continuous efforts are made in order to modernize and harmonize the policy and governance for crisis management in the country along with the developments in the European Union.⁶⁰³

1.2.2 Monitoring and analytical support to policy making; R&D

With the aim to bring all Research / Technological Development / Innovation activities under the management of appropriate entities, which will have a co-operational and complementary role in the implementation of the national strategic objectives, there was a restructure in the research policy making system in Cyprus through the National Strategic Plan for Development for the period 2007-2013⁶⁰⁴.

As mentioned in the Monitoring Policy and Research Activities on Science in Society in Europe (MASIS) National Report for Cyprus, the main actors within the Cyprus' structure for the research policy making system are⁶⁰⁵:

- The National Research and Innovation Council (NRIC). The highest and main responsible body within the new structure for the drawing of the long-term Cyprus policy in the research, technological development and innovation sectors.
- The Scientific Research Council (SRC). Its aim is to provide assistance and support to the NRIC on policy and strategic issues related to the research, technological development and innovation sectors.
- The Planning Bureau. It constitutes the administrative "arm" of the NRIC, playing mainly a coordinating role in the drawing of long-term policies in the Research, Technological Development and Innovation sectors, and the representation of Cyprus in the relevant European Union bodies.

⁶⁰¹ Chrysiliou C., Emergency Plans of Action in case of a disaster in Cyprus: Evacuating the old, disabled and younger people, Civil Defence.

⁶⁰² Ministry of Health: Strategic Plan 2016-2018, July 2015.

⁶⁰³ Papazoglou P. and Paris N., (CyCDF). Cyprus Safety Platform 2nd Symposium on Man-Made Catastrophes - January 2013

⁶⁰⁴ Sustainable Development Strategy, 2007. Cyprus

⁶⁰⁵ Dimopoulos, Christos, Monitoring Policy and Research Activities on Science in Society in Europe. National Report, Cyprus. October 2011

- The Research Promotion Foundation. It constitutes the executive entity of the new system, realizing the long-term policies of Research, Technological Development and Innovation mainly through the implementation of the National Framework Programs.

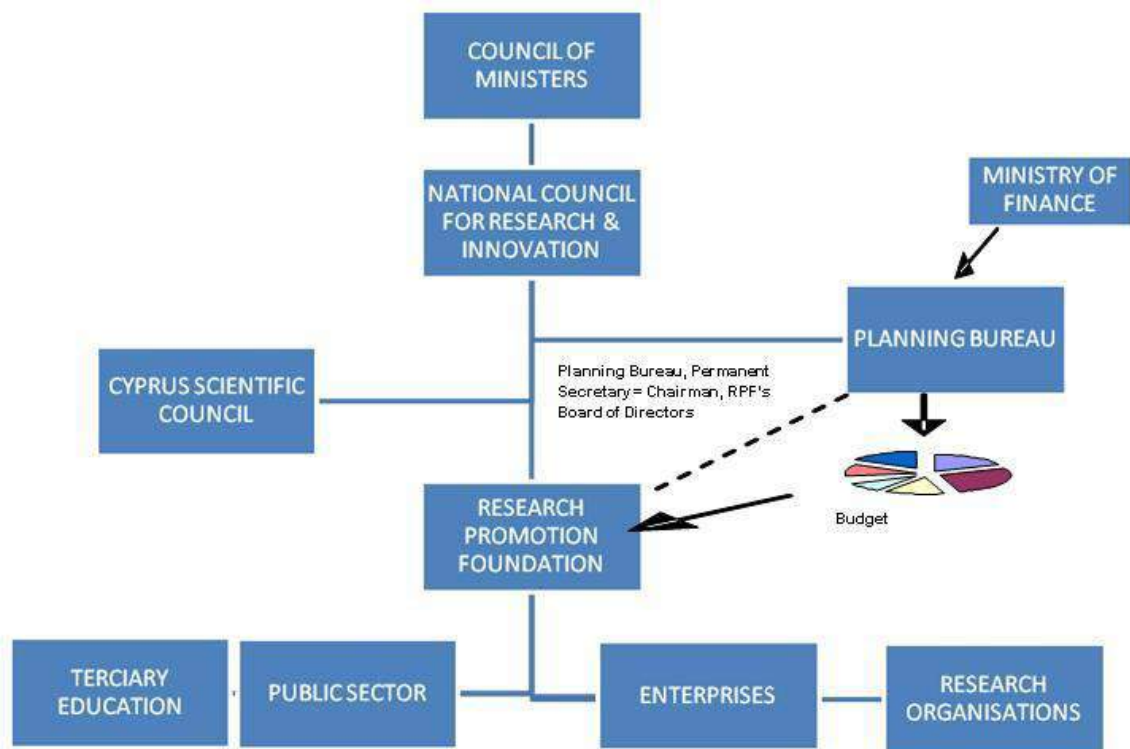


Figure 80: The R&D landscape of Cyprus⁶⁰⁶

Cyprus is also participating in numerous research and other projects in relation to crisis management, contributing to both policy making as well as any disaster risk reduction measures. Some examples of finalised projects:

- EUTAC - European Technical Assistance Cooperation (<http://www.juh-ipc.eu/eutac/>)
The project's aim was to develop a Technical Assistance and Support Team for an assistance of EU Civil Protection interventions, through the creation of Assessment Mission Kits and Technical Assistance Support Teams.
- QuestCity (<http://www.juh-ipc.eu/questcity/>)
QuestCity – a free social game (<http://www.questcity.eu/>) in which the players are confronted to a variety of emergency situations and asked to avert dangers and harms from themselves or others by providing adequate assistance while awarded with virtual incentives. In the European project consortium of this project participated also the Civil Defence department of the Ministry of Interior of the Republic of Cyprus as an associated beneficiary.

GDCD also participates in ongoing projects, such as the PACES project (<http://www.paces-project.eu/index.php/en/>) which is a 2-year project and started in 2016. It is co-funded by the EU Humanitarian Aid & Civil Protection, in the area of preparedness in Civil Protection and Marine Pollution under Grant Agreement no ECHO/ SUB/2015/713774/PREP04.

⁶⁰⁶ The R&D Landscape in Cyprus, Accessed February 11, 2016. http://www.euraxess.org.cy/services_incoming_practical_info_1.shtml

1.2.3 Policy for Prevention

GDCD takes certain prevention and preparedness measures, in co-operation with other involved services, in order to respond in the event of a disaster. Such preventative measures are the following:

- Preparing Action Plans such as the "Enceladus", for earthquakes
- Carrying out various exercises, with different possible scenarios
- Training, equipping and exercising department personnel
- Providing information to the population at regular intervals
- Constructing and designing shelters

1.2.4 Policy for Preparedness

In addition to the prevention efforts, Cyprus' efforts regarding preparedness are supported by the EU Civil Protection Mechanism training program aiming in improving the level of preparedness of the systems for civil protection systems, their personnel and the rest of the population. These projects tend to be used to develop new concepts or models.

Furthermore, GDCD has installed in Cyprus and monitors a warning system for its population, more specifically an electronic siren system, which allows GDCD to alert the public with alarms, live transmissions and pre-recorded voice messages.⁶⁰⁷

1.2.5 Policy for Response

In the case of disasters, the responsible forces for response depend on the disaster, such as the police or the fire service, according to the specific plans for each disaster. GDCD is not a direct response force, but is prepared to act and provide assistance to the other services in case of a major disaster. Moreover, the Civil Defence Rescue department under the GDCD is organised to respond immediately in case of emergencies and if the remaining authorised forces of the state services require assistance. The rescue teams of the Civil Defence Rescue department continually go through training and special exercises in equipped training grounds and also take part in firefighting conditions as well as water plumping during floods.⁶⁰⁸

1.2.6 Policy for Relief and Recovery

The Welfare Department of the Civil defence in Cyprus is in charge of the performance of different types of humanitarian tasks that aim to protect the civilian population from different dangers and to help them recover from the immediate effects of disasters or war hostilities and also provide them with the necessary conditions for their survival, such as shelters, catering and clothing for the homeless, psychological support to the victims and generally provide relief to the population in the event of a disaster.

The mission of the First Aid Department of the Civil defence in Cyprus is to provide First Aid service in the event of a disaster, until medical assistance becomes available. Also the Joint Rescue Coordination Centre organizes the search and rescue system of the Republic in order to be able to

⁶⁰⁷ QuestCity Partners, accessed February 8, 2016. <http://www.juh-ipc.eu/questcity/questcity-partners/>

⁶⁰⁸ CCD – Cyprus Civil Defence, Cyprus Civil Defense and Disaster Management Arrangements, Accessed February 11, 2016. <http://www.cyprus-storms.net/cypruscivildefense.htm>

find and rescue in the least possible time people whose lives are threatened as a result of an air or naval accident.⁶⁰⁹

For mass emergency catering purposes, there is a special Civil Defence Catering Plan, to be implemented in co-operation with other services. To implement the plan, Civil Defence has a mobile catering unit, the operation of which is undertaken by specially-trained personnel. The unit takes part in exercises to ensure readiness in the event of an emergency.

Civil Defence has implemented a programme for the construction and design of shelters, mainly in the urban areas. For this purpose, civil engineers designed additions and alterations to suitable basements, with the owners' consent, to render them safe for short periods of stay and protection of the civil population. A large number of shelters have already been completed.

Restoration of damage service, headed by the Director of Civil Defence, was introduced after the earthquake in Paphos in 1995, to house the afflicted and to repair damage. The 1996, 1998 and 1999 earthquakes followed in Limassol and Paphos. The service's activities continued during the Limassol tornado in 2003 and the flooding in Nicosia in 2004. During these disasters, the service provided grants to restore the damages. In addition to the above, it had an advisory role in the earthquake control programmes and in upgrading refugee housing estates, schools and other public buildings.⁶¹⁰

1.3 Financing

Other than civil protection purposes allocated to other government agencies 0.0452% of GDP is allocated for Cyprus Civil Defence/Protection organisation.

Furthermore, there is an ongoing support⁶¹¹ from the Participating States to the EU Civil Protection Mechanism in which participating states, like Cyprus, may find funding from 2.800.000 EUR, for both, Prevention and Preparedness projects².

1.3.1 Investing in preparedness

Information on this subject could not be found.

1.3.2 Investing in consequence management

Information on this subject could not be found.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Information on this subject could not be found.

⁶⁰⁹ Cyprus Joint Rescue Coordination Center, Mission, accessed February 11, 2016. http://www.mod.gov.cy/mod/CJRCC.nsf/cjrcc01_en/cjrcc01_en?OpenDocument

⁶¹⁰ Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2009

⁶¹¹ Humanitarian Aid and Civil Protection. Civil Protection Exercises. 2015. http://ec.europa.eu/echo/funding-evaluations/financing-civil-protection/civil-protection-exercises_en

1.4.2 Departmental Lessons Learned systems

Information on this subject could not be found.

1.4.3 Centralised (national) Lessons Learned system

Information on this subject could not be found.

1.4.4 International exchange for Lessons Learned

Cyprus, as a member of the European Union and ECHO, is participating to the European Experts training and exchange programme. The Civil Protection Mechanism's experts exchange system allows for the secondment of civil protection experts to participating states. This exchange of experts provides participants with knowledge and experience on all aspects of emergency intervention and the different approaches of national systems. In Cyprus, GDCC has the coordinating role of the experts exchange programme.

1.4.5 Regular policy reviews

The detailed plans for Civil Protection, based on the master plan “Zenon” are revised and updated every 6 to 12 months by the responsible bodies.⁶¹²

1.5 Resilience

Information on this subject could not be found.

1.6 Information sharing and data protection

Information on this subject could not be found.

⁶¹² Cyprus fully prepared for natural disasters, Famagusta Gazette, Accessed February 12, 2016. <http://famagusta-gazette.com/cyprus-fully-prepared-for-natural-disasters-p24959-69.htm>

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The responsibility of the civil defence rests in general with the Ministry of the Interior. The Minister of the Interior, on behalf of the Council of Ministers, is responsible for the implementation of the Civil Defence Act and the relevant regulations as well as the overall supervision and control of the civil defence system. He coordinates services and organisations which are declared as essential for the civil defence purposes.⁶¹³

2.2 General crisis (emergency, disaster) management law

The Civil Defence Act was amended and consolidated in 1996, and new regulations were enacted in 1997 in order to reorganise and strengthen the whole civil defence system of the republic. These regulations were then updated as shown below:

1. In 2004 and to comply with the EC Act with the Directive 96/82/EK of the council of the 9th of December 1996 for the tackling of major accident hazards involving dangerous substances.
2. In 2006 updated in order to comply with the EC Act with title "Directive 2003/105/EK of the European Commission and the council of the 16th of December 2003 for the amendment of the Directive 96/82/EK of the Council for the tackling of major accident hazards involving dangerous substances".

2.3 Emergency rule

In case of war or disaster which requires mass mobilization of human resources or means, the Council of Ministers or the Minister of the Interior on behalf of the Council may declare a "State of Civil Defence" for 48 hours (an extension of this period requires the approval of the House of Representatives).⁶¹⁴

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The Council of Ministers may declare the administration of any Ministry or any Governmental Department/Service or Independent Office or any Public or Private Corporation an "essential service" for civil defence purposes. Any such declaration has a legal effect on the "essential services"

⁶¹³ Cyprus Civil Defense and Disaster Management Arrangements, Accessed February 11, 2016. <http://www.cyprus-storms.net/cypruscivildefense.htm>

⁶¹⁴ Cyprus Civil Defense and Disaster Management Arrangements, Accessed February 11, 2016. <http://www.cyprus-storms.net/cypruscivildefense.htm>

concerned in terms of planning, training, preparedness and response, in order to be able to participate effectively in the civil defence system.⁶¹⁵

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Members of Civil Defence serve either at the General Directorate of Civil Defence (GDGD) or at one of the five regional managements (RMCD): Nicosia, Limassol, Larnaca, Paphos and Famagusta.

Under every Regional Management, operate Civil Defence Stations and Substations in the towns and within the communities. This is where the volunteers and the citizens serving the Civil Defence attend for training and exercises. Attendance is on fixed days and times of the week. In communities where there are no Civil Defence units, organisation is carried out in co-operation with Community Councils⁶¹⁶.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

All citizens of the Republic of Cyprus aged over 16 years old have the duty to serve the Civil Defence force for a period that does not extend the two years. Males usually serve the Civil Defence after they have been released from the National Guard duties. Enrolment takes place once a year, following a decision of the Council of Ministers. The notification is issued by the Minister of Interior, and calls male and female citizens to serve and obliges the called citizens to attend a specified unit and enrol either in the town or in the countryside. During their service, members attend training and exercise on fixed days and time in first aid, border guard and communications.⁶¹⁷

Furthermore, anyone aged over 16 years old has the right to request to join voluntarily the Civil Defence and offer his/her services as a member.⁶¹⁸

2.7 Legal regulations for international engagements of first responders and crisis managers

Cyprus is member of various international organisations in relation to crisis management and response. Some of them are listed below:

- The EU Civil Protection Mechanism
- In 2004 Cyprus Civil Defence Rescue Team got the INSARAG⁶¹⁹ certification and became a member⁶²⁰. INSARAG is a global network of more than 80 countries and organisations under the United Nations and deals with urban search and rescue related issues.
- The Organisation for Security and Co-operation in Europe (OSCE)⁶²¹.

⁶¹⁵ Vademecum - Civil Protection, Cyprus - Disaster management structure, Accessed February 11, 2016. http://ec.europa.eu/echo/files/civil_protection/vademecum/cy/2-cy-1.html

⁶¹⁶ National Report – Cyprus. Study on Volunteering in the European Union. 2011

⁶¹⁷ Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2009

⁶¹⁸ Ministry of Defence, Civil Defence, Accessed February 11, 2016. <http://www.moi.gov.cy/moi/cd/cd.nsf>

⁶¹⁹ International Search and Rescue Advisory Group (INSARAG), Accessed February 12, 2016. <http://www.insarag.org/>

⁶²⁰ Prodromou M., Cyprus Civil Defence - Prometheus presentation, April 2013

⁶²¹ Organisation for Security and Co-operation in Europe (OSCE), Accessed February 12, 2016. <http://www.osce.org/>

3 Organisation

3.1 Organisational chart

According to the study made on the Stock-taking of existing critical infrastructure protection activities for the European Commission by Booz & Company⁶²²,

“The management of emergencies in Cyprus relies on the Civil Defence organisations.

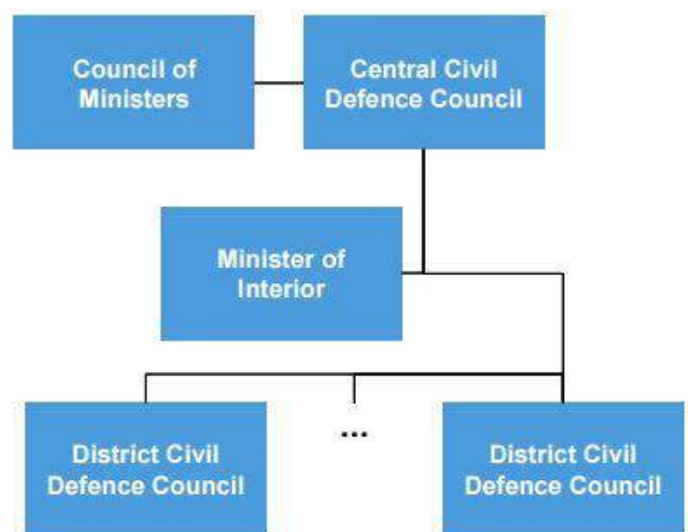


Figure 81: Organisational chart of the Civil Defence organisations in Cyprus

- The **Minister of Interior** on behalf of the Council of Ministers⁵⁵ is responsible for the implementation of the Civil Defence Law and the relevant regulations and has the overall supervision and control of the Civil Defence System. Accordingly, Civil Defence in general is under the responsibility of the Ministry of Interior.
- The **Council of Ministers** may declare the administration of any Minister, any Governmental Department/Service or Independent Office, or any public or private corporation, as an “Essential Service” for Civil Defence purposes. Any such declaration has legal implications for the services concerned. It requires them to undertake planning and training, improving their preparedness and response capabilities in order to participate effectively in the Civil Defence System. The Council of Ministers may appoint a Central Civil Defence Council.
- **Civil Defence** is a Department of the Ministry of Interior and its primary mission is the execution of measures to prevent natural or manmade disasters and to overcome their consequences.

The Council of Ministers approves the General Civil Defence Plan, which defines the role, duties and responsibilities of all bodies of the civil defence system. According to these roles, duties and responsibilities, each body (mainly the “essential services”) has to elaborate civil defence plans in

⁶²² Booz & Company, Stock-taking of existing critical infrastructure protection activities, European Commission, October 2009

order to deal with contingencies, which may arise either because of war or disaster. The plans are submitted to the Central or District Civil Defence Councils (according to their level) for checking and coordination.⁶²³

In the event of a crisis, the members of the ministerial team for crisis management consist of the Minister of Foreign Affairs, the Minister of Interior, the Minister of Transport and Public Works, the Minister of Energy, Commerce, Industry and Tourism and the Minister of Labour and Social Security, or their representatives.⁶²⁴

The figure below gives an outline of the organisational structure of the Disaster Management structure in Cyprus which is handled by the Civil Defence headquarters or GDCD, under the Ministry of Interior. Within the GDCD operate the five regional Civil Defence administrations, the RMCDs, in Nicosia, Limassol, Larnaca, Paphos and Ammochostos.

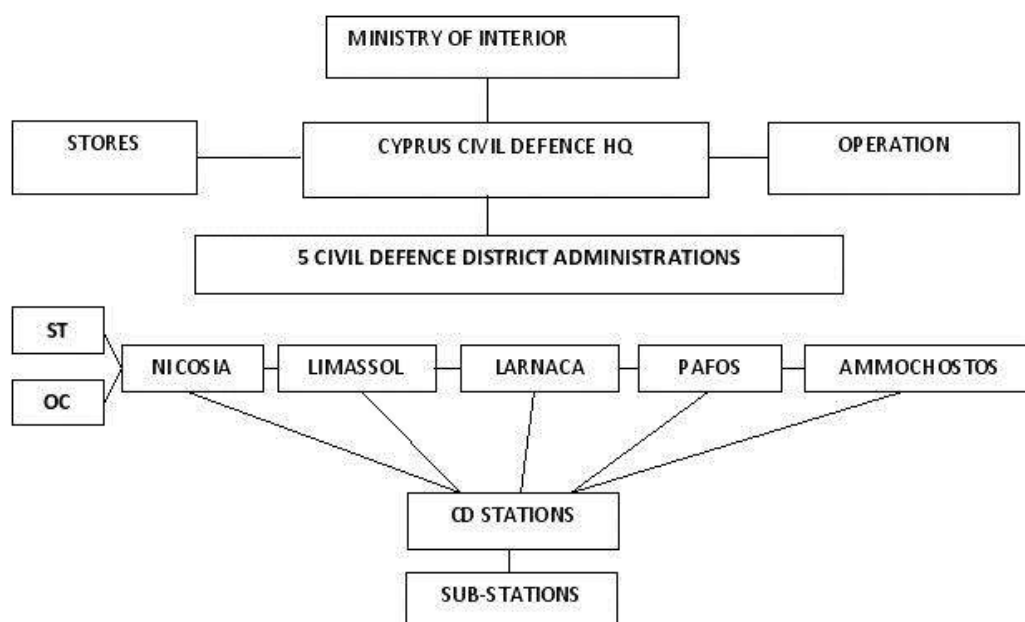


Figure 82: Cyprus civil defence organisational chart⁶²⁵

3.2 Organisational cooperation

The republic of Cyprus is a member state of the following platforms and organisations:

European and Mediterranean Major Hazards Agreement (EUR-OPA)

Created in 1987, the European and Mediterranean Major Hazards Agreement (EUR-OPA) is a platform for co-operation between European and Southern Mediterranean countries in the field of major natural and technological disasters. Its field of action covers the knowledge of hazards, risk prevention, risk management, post-crisis analysis and rehabilitation.

Website: <http://www.coe.int/en/web/europarisks/home>

⁶²³ Booz & Company, Stock-taking of existing critical infrastructure protection activities, European Commission, October 2009

⁶²⁴ Minister of Defense: Cyprus a country standard for crisis management, Accessed February 11, 2016. <http://www.sigmalive.com/news/politics/72963/yp-amynas-i-kypros-xoraprotypo-gia-diaxeirisi-kriseon#.dpuf>

⁶²⁵ Vademecum - Civil Protection, Cyprus - Disaster management structure, Accessed February 11, 2016. http://ec.europa.eu/echo/files/civil_protection/vademecum/cy/2-cy-1.html

International Civil Defence Organisation (ICDO)

The International Civil Defence Organisation (ICDO) is an intergovernmental organisation with the objective to contribute to the development by States of structures ensuring the protection and assistance of population and safeguarding property and the environment from natural or man-made disasters.

Website: <http://www.icdo.org/>

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Information on this subject could not be found.

4.2 Operations planning

As mentioned in Cyprus Civil Defence: Structure, capabilities, history, manpower⁶²⁶,

The Civil Defence Administrative Operations Control Centre operates with a permanent staff on a 24-hour basis, which gives great capabilities to the Republic of Cyprus.

One of these is the link with the EU Emergency Response Coordination Center (ERCC), that uses the Common Emergency Communication and Information System (CECIS system), and includes all member states and countries that have signed a Memorandum of Understanding with the Directorate Humanitarian Aid and Civil Protection. The Operations Control Centre is the National Contact Point for European Community Urgent Radiological Information Exchange (ECURIE) to monitor ionizing radiation in Europe, and transmits the information to the Ministry of Labour and Social Insurance, which is competent for applying the legislation.

The Centre is also the National Contact Point of the European Management Safety Agency (EMSA) in monitoring water pollution in Europe. The information is transmitted to the Fisheries Department, which is responsible for pollution control.

Furthermore, the Centre is responsible for monitoring the electronic sirens system, operating wireless networks, handling information systems, and for the operation of the Centre as a Command Centre in the event of mobilization.

In addition to the above, Civil Defence has at its disposal multifunctional mobile operations control centres.

4.3 Logistics support in crises

Information on this subject could not be found.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The Civil Defence Administrative Operations Control Centre operates with a permanent staff on a 24-hour basis, which gives great capabilities to the Republic of Cyprus.

Some of the main responsibilities of this Centre are monitoring the electronic sirens system, operating wireless networks, handling information systems, and for the operation of the Centre as a

⁶²⁶ Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2014

Command Centre in the event of mobilization. In addition to the above, Civil Defence has at its disposal multifunctional mobile operations control centres.

Civil Defence has set up an electronic siren network in towns and communities to warn the population in the event of a threat of a natural disaster or hostile air activities. The siren network has the following abilities:

- to sound the alarm
- to transmit a mobilisation signal
- to transmit vocal messages

When the sirens sound, citizens are obliged to follow both Civil Defence instructions and those of other essential services. Additional analytical information on the subject is provided on the special Civil Defence leaflets, entitled "Black-out" and "Alarm".⁶²⁷

Cyprus Civil Defence has established a reliable wireless communication system within its units and other state services, municipalities and communities. This modern system has island-wide range and it is very important in case the telephone network breaks down in the event of a major disaster.

⁶²⁷ Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2014

5 Capabilities

5.1 Human resources

In order to prepare for, respond and train to disasters, the Civil Defence Force consists of:

- a permanent and well-organised staff of 33 persons
- an interchangeable staff of 45 persons
- around 600 volunteers serving under special terms island-wide
- around 7000 male and female citizens serving Civil Defence island-wide⁶²⁸

Other important resources of the civil defence in Cyprus are private and public organisations that have been declared "essential" for civil defence purposes as well as volunteers such as the Cyprus Red Cross and St John Ambulance and other local associations.⁶²⁹

5.2 Materiel (non-financial) resources

The Welfare Department is responsible for providing shelters, catering and clothing for the homeless, psychological support to the victims and generally provide relief to the population in the event of a disaster.⁶³⁰

Civil Defence has implemented a programme for the construction and design of shelters, mainly in the urban areas. For this purpose, civil engineers designed additions and alterations to suitable basements, with the owners' consent, to render them safe for short periods of stay and protection of the civil population.⁶³¹

For mass emergency catering purposes, there is a special Civil Defence Catering Plan, to be implemented in co-operation with other services. To implement the Plan, Civil Defence has a mobile catering unit, the operation of which is undertaken by specially-trained personnel. The unit takes part in exercises to ensure readiness in the event of an emergency.⁶³²

In case of war or disaster which requires mass mobilization of human resources or means, the Council of Ministers or the Minister of the Interior on behalf of the Council may declare a "State of Civil Defence" for 48 hours (an extension of this period requires the approval of the House of Representatives).⁶³³

⁶²⁸ Civil Defence, Structure, Capabilities, History, Manpower, Cyprus Civil defence, Republic of Cyprus, 2014

⁶²⁹ Vademecum - Civil Protection, Cyprus - Disaster management structure, Accessed February 11, 2016. http://ec.europa.eu/echo/files/civil_protection/vademecum/cy/2-cy-1.html

⁶³⁰ Booz & Company, Stock-taking of existing critical infrastructure protection activities, European Commission, October 2009

⁶³¹ Civil Defence, Structure, Capabilities, History, Manpower, Cyprus Civil defence, Republic of Cyprus, 2014

⁶³² Civil Defence, Structure, Capabilities, History, Manpower, Cyprus Civil defence, Republic of Cyprus, 2014

⁶³³ Vademecum - Civil Protection, Cyprus - Disaster management structure, Accessed February 11, 2016. http://ec.europa.eu/echo/files/civil_protection/vademecum/cy/2-cy-1.html

5.3 Training

The personnel of all departments and services of the Civil Defence undergo training both in Cyprus and abroad on a constant basis⁶³⁴. The Cyprus Civil Defence members are trained as well as the staff of the essential services and departments.

The volunteers and the citizens serving the Civil Defence attend for training and exercises in the Civil Defence Stations and Substations in the towns and within the communities, under every Regional Management. Attendance is on fixed days and times of the week. In communities where there are no Civil Defence units, organisation is carried out in co-operation with Community Councils.⁶³⁵

National, regional and local exercises are run, including the following:

- Earthquake exercises, among these “Egkelados”
- Seveso II exercise
- Search and rescue exercises
- Welfare exercises.

GDCD also takes part in international exercise programmes such as the Assessment Mission Course (AMC), a specialised course for the target group of technical and assessment experts in the field of emergency management and European Commission officials. Further information can be found in <http://www.juh-ipc.eu/amc/>.

The GDCD is also a partner in the very complex training called “Exercise Unified Response – EUR15” under the EU Civil Protection Mechanism which is scheduled for the 23rd of February to the 3rd of March 2016 in London. Further details on the exercise can be found in <http://www.london-fire.gov.uk/exercise-unified-response.asp>.

5.4 Procurement

5.4.1 Procurement regulation

Civil defence specific information could not be found.

5.4.2 Procurement procedures

Civil defence specific information could not be found.

5.5 Niche capabilities

N/A

⁶³⁴ Cyprus fully prepared for natural disasters, Famagusta Gazette, Accessed February 12, 2016. <http://famagusta-gazette.com/cyprus-fully-prepared-for-natural-disasters-p24959-69.htm>

⁶³⁵ Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2009

Resources

Legislative acts

- Act 3111/1996 (Government Gazette 117(I) / 31.12.1996), Civil Defence Law
- Additional Act 3170/1996 (Government Gazette 221 / 25.07.1997) , Modification of Civil Defence Law
- Additional Act 3853/2004 (Government Gazette 509 / 30.04.2004) , Modification of Civil Defence Law
- Additional Act 4084/2006 (Government Gazette 605 / 10.03.2006) , Modification of Civil Defence Law

Other normative acts

N/A

Official documents (white papers, strategies, etc.)

- Zenon plan
- EGGEADOS plan – for earthquakes
- ESTIA – major middle east crisis
- Fire Service Union Officers. Implementation of the European Directive “SEVESO” in Cyprus. Definition of measures and conditions to address risks of major accidents in establishments or plants due to the existence of hazardous substances. April 2015.
- IFESTOS – evacuation from forest fires
- Ministry of Health: Strategic Plan 2016-2018, July 2015.
- Ministry of Labour, Social Welfare and Social Insurance, Special National plan “Electra” for preparedness and response in extraordinary radiological and nuclear incidents. 2015.
- Civil Defence, Annual Report 2011, Ministry of Interior, Republic of Cyprus, February 2012
- Civil Defence, Structure, Capabilities, History, Manpower, Cyprus Civil defence, Republic of Cyprus, 2014
- Sustainable Development Strategy, 2007. Cyprus

Online resources (e.g. websites of key CM organizations)

- Civil Defence - www.moi.gov.cy/cd
- Cyprus Red Cross Society - <http://www.redcross.org.cy/>
- Cyprus Joint Rescue Coordination Center - <http://www.mod.gov.cy/>
- Ministry of foreign affairs of the Republic of Cyprus, Crisis Management Centre - http://www.mfa.gov.cy/mfa/mfa2006.nsf/consular06_en/consular06_en?OpenDocument
- E-PS Public Procurement Portal of the Republic of Cyprus - <https://www.eprocurement.gov.cy/ceproc/>

- EU Humanitarian Aid and Civil Protection department - <http://ec.europa.eu/echo/>
- Cypriot National Guard - <http://www.army.gov.cy/>
- Cyprus Fire Service - www.fs.gov.cy
- Cyprus Police - www.police.gov.cy
- Department of Forests - <http://www.moa.gov.cy/moa/fd/fd.nsf/>
- International Search and Rescue Advisory Group (INSARAG) - <http://www.insarag.org/>
- World Trade Organization - <https://www.wto.org/>
- Organisation for Security and Co-operation in Europe (OSCE) - <http://www.osce.org/>
- eProcurement - <https://www.eprocurement.gov.cy/ceproc>

Publications

- Single European emergency Call Number 112 – 112 leaflet
- Chrisostomou Kristis, Seismic Protection of Cyprus, October 2009
- Dimopoulos, Christos, Monitoring Policy and Research Activities on Science in Society in Europe. National Report, Cyprus. October 2011
- BeSafeNet Booklet, Cyprus Civil Defence and Europa
- Republic of Cyprus, Cyprus Civil Defence: Structure, capabilities, history, manpower. 2014
- Booz & Company, Stock-taking of existing critical infrastructure protection activities, European Commission, October 2009

Expert interviews

N/A



Driving Innovation in Crisis Management for **E**uropean **R**esilience

CZECH REPUBLIC

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: AIT (Florian Eicher, Bettina Jager)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ATOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In the Czech Republic, the Civil Emergency Planning (CEP) includes “planning, co-ordination and management precautions to ensure preparedness of the state to prevent and manage emergencies and crisis situations threatening the population, the running of the administration, the economy, to perform international security engagements as well as supporting the armed forces in case of state emergencies.” (UNISDR Europe 2013)

As an important part of the security system, the Crisis Management in Czech Republic includes the political sphere as well as the strategy of protecting of the population, finance and economy (Swedish Civil Contingencies Agency 2009). A clear division can be identified between the Ministry of the Environment, which is in charge for coordinating activities to achieve the goals of the Hyogo Framework for Action and the Ministry of the Interior as the primarily responsible for disaster risk reduction. Undoubtedly, two ministerial departments can be identified as the predominantly. On the one hand, the department of Security and Crisis Management at the Ministry of the Environment of the Czech Republic and on the other hand, the Department of International Relations at the Ministry of the Environment of the Czech Republic, which has been labelled as the second focal point. The CEP-system does not cover solely centralised protection approaches, but also processes of prevention planning, preparedness and consequence management at the level of municipalities. The Integrated Rescue System (IRS) is a core mechanism to apply the goals, defined by the Hyogo Framework of Action for the period 2005 – 2015. By coordinating several actors in several areas, especially, rescue and security forces at the level of the state and the local governments as well as legal entities and individuals, it is a main driver to ensure an efficient response to natural disasters. Chaired by the Fire Rescue Service, experts, technical staffs as well as Public Health Authorities have been involved in the system. As indicated by Bakken and Rhinard (2013), the military as a provider of relevant resources plays an important role within the IRS. The mobilisation of rescue forces and operational resources is organised by the operations and Information Centre of the IRS.

Table of Contents

CZECH REPUBLIC Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	493
Overview.....	494
Table of Contents	495
List of Figures	497
List of Tables.....	497
List of Abbreviations.....	498
1 Policy	500
1.1 Risk Assessment	501
1.2 Policy and Governance	505
1.2.1 Strategy scope and focus	505
1.2.2 Monitoring and analytical support to policy making; R&D	507
1.2.3 Policy for Prevention	507
1.2.4 Policy for Preparedness	507
1.2.5 Policy for Response	508
1.2.6 Policy for Relief and Recovery	508
1.3 Financing	509
1.3.1 Investing in preparedness	509
1.3.2 Investing in consequence management	509
1.4 Policy review, Evaluation & Organisational Learning	509
1.4.1 Post-Disaster Assessment	509
1.4.2 Departmental Lessons Learned systems	510
1.4.3 Centralised (national) Lessons Learned system	510
1.4.4 International exchange for Lessons Learned	510
1.4.5 Regular policy reviews	510
1.5 Resilience	511
1.6 Information sharing and data protection	512
2 Legislation	514
2.1 Crisis (emergency, disaster) management concept.....	514
2.2 General crisis (emergency, disaster) management law	515
2.3 Emergency rule	515

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	516
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	516
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	516
2.7	Legal regulations for international engagements of first responders and crisis managers	517
3	Organisation	518
3.1	Organisational chart.....	518
3.2	Organisational cooperation	521
4	Procedures	524
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	524
4.2	Operations planning.....	525
4.3	Logistics support in crises	525
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	525
5	Capabilities	527
5.1	Human resources	527
5.2	Materiel (non-financial) resources	529
5.3	Training	530
5.4	Procurement	531
5.4.1	Procurement regulation	531
5.4.2	Procurement procedures	533
5.5	Niche capabilities	534
	Resources	535
	Official documents (white papers, strategies, etc.)	535
	Online resources (e.g. websites of key CM organizations)	535
	Publications	536
	Expert interviews	537

List of Figures

<i>Figure 1: Risk areas of flooding in the Czech Republic according to Red Cross Czech republic (Red Cross EU Office)</i>	503
<i>Figure 2: Map sheet of the flood plain from the Svitanka River, Czech Republic from Jelinek et al. (2007)</i>	504
<i>Figure 3: Crisis Management Authorities of the Czech Republic</i>	519
<i>Figure 4: Structure of Crisis Management authorities in the Czech Republic</i>	520

List of Tables

<i>Table 1. Structure of Crisis Management in the Czech Republic. (Bakken and Rhinard 2013)</i>	500
<i>Table 2. List of Crisis between 1990-2014 according to EM-DAT</i>	502
<i>Table 3. Overview on operational forces for protection and rescue activities in the Czech Republic</i>	529

List of Abbreviations

AMSR	Administrative of State Material Reserves
CM	Crisis Management
CEP	Civil Emergency Planning
CRC	Czech Red Cross
DRR	Disaster Risk Reduction
EAPC	Euro Atlantic Partnership Council
ECMWF	European Centre for Medium-Range Weather Forecasts
ECR	European Centre for the Regions
EIPA	European Institute of Public Administration European Centre for the Regions
ERCC	Emergency Response Coordination Centre
EU	European Union
EUMETNET	Network of European Meteorological Services
EUSF	European Union Solidarity Fund
GDP	Gross Domestic Product
ICPDR	International Commission for the Protection of the Danube River
ICPDR	International Commission for the Protection of the Danube River
ICPDR	International Commission for the Protection of the Danube River
MoD	Ministry of Defence
MoI	Ministry of Interior
NATO	North Atlantic Treaty Organization
NMHS	National Meteorological and Hydrological Service
OECD	Organisation for Economic Co-operation and Development
SOP	Standard Operating Procedure
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNISDR	United Nations Office for Disaster Risk Reduction
UN-OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNS	Office for the protection of the Constitutional Order
USAR	Urban Search and Rescue

WHO World Health Organisation

WMO World Meteorological Organisation

1 Policy

According to the (European Commission 2014) the Czech Republic is a unitary state with a parliamentary system; the Parliament consisting of two houses – the Chamber of Deputies and the Senate. At the lower administrative level, the country is divided into 14 regions and the statutory City of Prague. This division has been in place since 2002, when the Reform of Territorial Administration took place and the counties were replaced by regions. The regions are further sub-divided into municipalities. The legislative and main administrative competences rest on the national level with respective ministries. The political system of the country is best described as a majoritarian democracy with some significant aspects of consensus democracy (European Commission 2014).

In line with (Bakken and Rhinard 2013) the civil security system is rather decentralized. Authority and responsibility for crisis preparation and response rest at the regional level. A state of danger can be declared by the regional council president for the whole region or its part, for a period of maximum 30 days when there is a natural disaster, ecological or industrial accident or if life, health or property of citizens is threatened. When a crisis cuts across the regions, the central government assumes responsibility.⁶³⁶ Up-scaling to a higher degree, then, is the *state of emergency* which is called by the government for a period of maximum 30 days. The reasons are the same as in the previous case, however, the scale of the disaster must be here “significant”. Typically, the state of emergency is declared when two or more regions are affected by a crisis (Bakken and Rhinard 2013).

<i>Administrative level</i>	<i>Crisis management authority</i>	<i>Consultative and advisory body</i>	<i>Crisis Management Centre</i>
Centre	Government, the prime minister	National Security Council (esp. Committee for Civil Crisis Planning)	Central crisis staff
Region	Regional president (<i>hejtman</i>)	Security council of the region	Crisis staff of the region
Municipality with extended powers	Mayor (<i>starosta</i>) of the municipality with extended powers	Security council of the municipality with extended powers	Crisis staff of the municipality with extended powers
Municipality	Mayor (<i>starosta</i>)	-	Crisis staff of the municipality

Table 25. Structure of Crisis Management in the Czech Republic. (Bakken and Rhinard 2013)

The Security Council is a permanent body.⁶³⁷ At the regional and municipal levels it consists of the representatives of the regional/ municipal office, basic bodies of the IRS, military and health bodies.

⁶³⁶ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

⁶³⁷ <http://www.thefreelibrary.com/A+question+of+determinacy%3a+the+legal+status+of+anticipatory...-a0195265741>

1.1 Risk Assessment

According to Jelinek, Wood and Harvas (2007) the Czech Republic has no national multi-hazard risk assessment available to inform planning and developing decisions. Although an Agreement for national standards for multi hazard risk assessments does exist. Multi-hazard assessment has been done for some areas or cities but not at the level of the whole state. The main problem is that all measures have been developed for floods, which are a far more frequent disaster type. Much less has been done for other types of disasters which are occurring relatively rarely (Bakken and Rhinard 2013). The Council Directive 2008/114/EC establishes a procedure for the identification and designation of European critical infrastructures ("ECIs"), and a common approach to the assessment of the need to improve the protection⁶³⁸ of such infrastructures in order to contribute to the protection of people (The General Directorate of Fire Rescue Service of CR 2014).

The most frequent crises in the Czech Republic since its democratic transition in 1989 have been caused by extreme weather conditions, most notably by floods, but also through extreme temperature and storms. In the area of industrial and transportation disasters, the Czech Republic has witnessed only five such events since 1990. These were two explosions – one methane explosion in a coal mine in 1990 and one ammunition explosion in a Soviet army barracks in early 1991 (Bakken and Rhinard 2013).

Table 26 provides an overview of crises between 1990 and 2014 and the number of persons killed, injured, and affected, according to the available data from EM-DAT (2014).

⁶³⁸ <http://www.hzscr.cz/hasicien/article/implementation-of-the-council-directive-2008-114-ec-in-the-czech-republic.aspx>

Start	End	Location	Type	Subtype	Killed	Total affected	Est. Damage (US \$ Millions)
01.06.2013	07.06.2013	Prague and its surroundings, Middle Bohemia, North West Bohemia, East Bohemia, South Bohemia	Flood	General Flood	15	1300000	828552
02.2012	02.2012	Opava	Extreme temperature	Cold wave	25		
07.12.2012	07.12.2012		Extreme temperature	Cold wave	7		
11.2010	12.2010	Prague	Extreme temperature	Cold wave	12		
07.08.2010	08.08.2010	Liberec (North)	Flood	General Flood	7	200	
01.06.2010	01.06.2010		Flood	General Flood	3		
15.05.2010	26.05.2010	Ostrava, Petrovice, Moravia-Silesia region	Flood	General Flood	1	1200	190
23.07.2009	24.07.2009		Storm	Local storm	2	12	
22.06.2009	28.06.2009	Nový Jičín, Jaroslav Palas, Pátek, Silesia, Olomouc, South Bohemia	Flood	General Flood	13	14450	
18.01.2007	18.01.2007		Storm	Extratropical cyclone	4		150
30.06.2006	30.06.2006	Vranov nad Dyjí	Flood	General Flood		115	
28.03.2006	17.04.2006	Ostrava, Prague, Vsetec, Brno, Ústí nad Labem, Znojmo, Hodonín, Třebíč, Třebíč, Třebíč, Třebíč, Olomouc, Brno, Novosedly, Decín	Flood	General Flood	6	4200	
27.12.2005	01.2006	East	Extreme temperature	Extreme winter conditions	15		
17.03.2005	25.03.2005	South Moravia	Flood	General Flood	1		
02.2005	02.2005		Storm	Local storm		3	
07.2003	07.2003		Extreme temperature	Heat wave	418		
29.02.2008	02.03.2008		Storm	Extratropical cyclone	2		50
26.10.2002	28.10.2002		Storm	Extratropical cyclone	2		20
07.08.2002	18.08.2002	Prague, Bohemia, Pilsen, Karlovy Vary, Západočeský, Districts of Central Bohemia, Southern Bohemia, Pilsen, Calsbad and Ústí regions	Flood	General Flood	18	200000	2400
01.2002	01.2002		Storm				
08.03.2000	13.03.2000		Flood	General Flood			80
10.05.1996	14.05.1996	Bruntál, Lichnov	Flood	General Flood	1	60	36
02.07.1997	24.07.1997	Moravia, Bohemia regions	Flood	General Flood	29	102107	1850
23.07.1998	27.07.1998		Flood	General Flood	6		52

Table 26. List of Crisis between 1990-2014 according to EM-DAT.

A) Natural hazards

An instructive example for Natural hazards is the flood of 2002 which were the most severe ones in the country's modern history. According to the International Federation of Red Cross and Red Crescent Societies (2012) in mid-July 2002, the meteorological situation was unfavourable, accompanied by intense torrential rains, especially in the Blansko District and the South Bohemia

Region. The IRS was used, large numbers of persons had to be evacuated (1,500 people were evacuated, approximately 100 people were rescued). Since 1998, floods have caused some 700 fatalities in Europe, the displacement of about half a million people and at least 25 billion Euros in insured economic losses. The floods in central Europe cannot be regarded as caused by climate change, but the probability of flooding is estimated to increase as a result of climate change.⁶³⁹

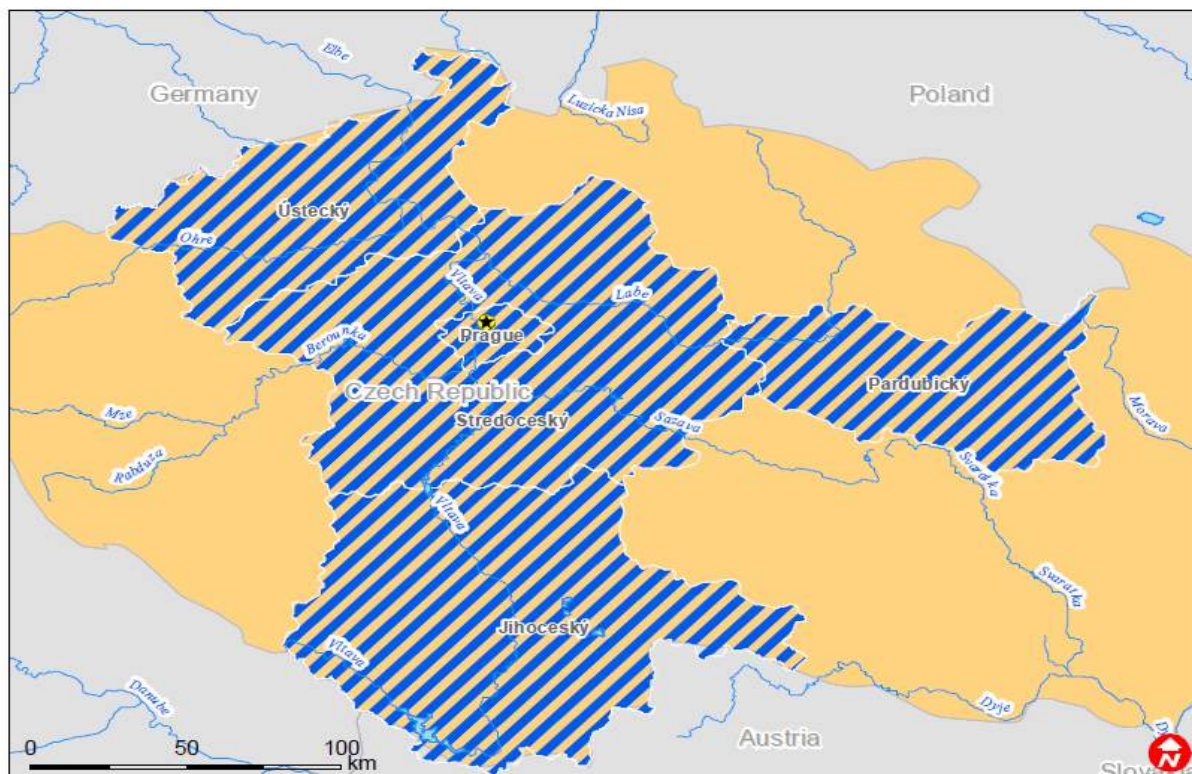


Figure 83: Risk areas of flooding in the Czech Republic according to Red Cross Czech republic (Red Cross EU Office)

Weather conditions indicate phenomena that, in accordance with present understanding, would be caused by climate change (Red Cross EU Office). Figure 1 illustrates the affected Regions the Czech Republic by Floods.

Studies on small-forested catchments showed that annual runoff is projected to decline in 2071–2100 compared to 1967–1990 by 10 to 30%.⁶⁴⁰ Impacts on the distribution of monthly flow are projected to be significant, with summer– autumn decreases of 30 to 95%, and winter increases of up to 40%. Mean daily flows are estimated to decrease by 70% from August to November. These results are based on 2 general circulation models, downscaled using 3 regional climate models under two emission scenarios, in combination with a hydrological model (Centre for Climate Adaption). According to ICPDR (2013), due to country location in the upper parts of the international river basins, as well as due to hydrological and geomorphological characteristics, people suffered in the past mainly from fluvial and flash floods caused by long and/or intense precipitation.

However, the diversity of terrain in the Czech Republic, dominated by low mountains and highlands excludes large-scale flooding.

⁶³⁹ <http://www.climateadaptation.eu/czech-republic/river-floods/>

⁶⁴⁰ <http://www.climateadaptation.eu/czech-republic/fresh-water-resources/>

According to Jelinek et al. (2007) all countries, except the Czech Republic, have national or regional coverage of flood hazard maps. In the Czech Republic are only Provincial maps with the periodicity of floods 5, 20 and 100 year available. Figure 2 shows an example of a provincial map on flood hazard.

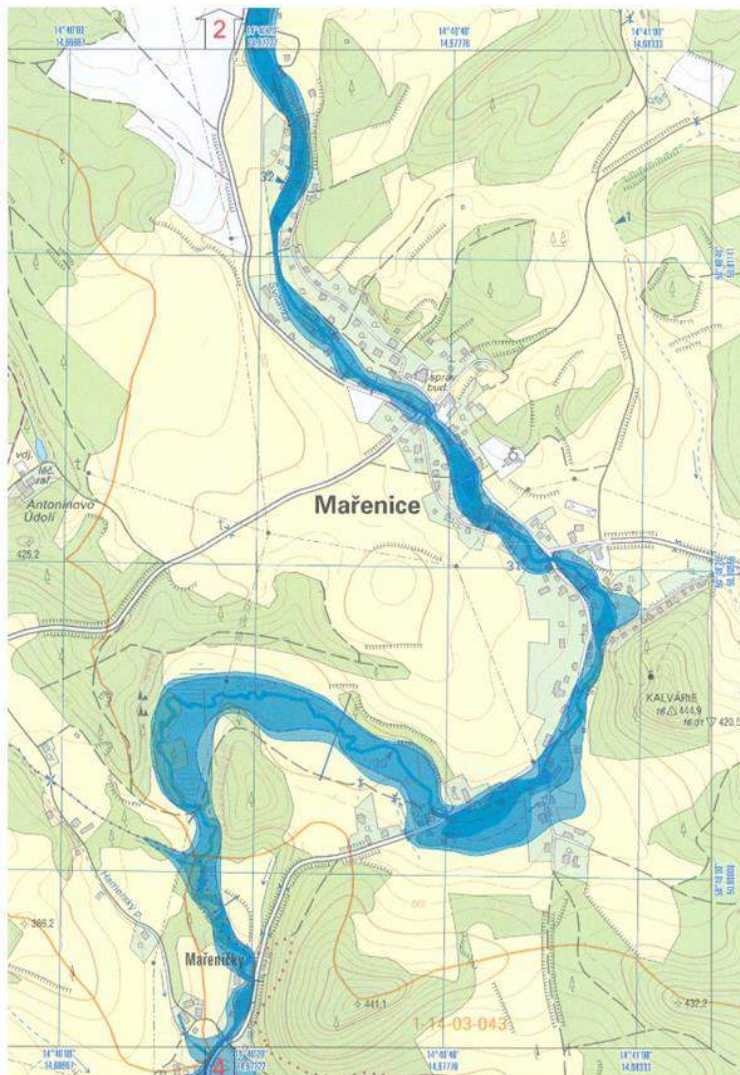


Figure 84. Map sheet of the flood plain from the Svitanka River, Czech Republic from Jelinek et al. (2007)

B) Technological hazards

According to Bakken & Rhinard (2013), the Czech Republic has witnessed in the area of industrial and transportation disasters only five such events since 1990. These were two explosions – one methane explosion in a coal mine in 1990 and one ammunition explosion in a Soviet army barracks in early 1991. Furthermore, there were two railway accidents in 1995 and 2008 and a bus crash in 2003. (Bakken and Rhinard 2013)

Specific environmental risks are safeguarded under the jurisdiction of the Department of Environmental Risks and Ecological Damage (DERED). They include environmental risks posed by chemical substances, related serious industrial accidents, and handling of genetically modified organisms (GMOs). The DERED draws national damage prevention policies for these areas, develops systems for evaluating these risks, proposes indicators for their monitoring, and executes specialised

state administration derived from relevant legislation. At the same time, the DERED guarantees activities resulting from the country's membership in international organisations (UNEP, OECD – Chemicals Programme and Working Groups on Industrial Accident Prevention, Biotechnologies, and Nanomaterials) and from ratified international treaties (Rotterdam Treaty, Helsinki Convention on Transboundary Effects of Industrial Accidents, Cartagena Protocol on Biosafety, Stockholm Convention on Persistent Organic Pollutants) in its jurisdiction. "Contaminated sites management in the Czech Republic is mainly covered by the Ministry of the Environment and other relevant ministerial bodies. Number of contaminated sites is remediated and the risk to the human health and to the environment is reduced every year.⁶⁴¹ The Department of Environmental Risks and Ecological Damage is the competent authority in this field (Ministry of the Environment of the Czech Republic 2014).

1.2 Policy and Governance

At the beginning of 2013, the Ministry of the Environment of the Czech Republic picked up the baton of Czech National Committee for Natural Disaster Reduction (founded in 2005) and fulfils now the role of National Platform for Disaster Risk Reduction in Czech Republic.⁶⁴²

The function of national platform and also a focal point for Hyogo Framework for Action is currently provided by the Ministry of Environment of the Czech Republic. Ministry of the Environment cooperates closely with the Czech National Committee for Natural Disaster Reduction (CNC-GDR), whose members are experts from the following institutions: Ministry of Agriculture, Ministry of Interior, Ministry of Foreign Affairs, Ministry of Regional Development, Headquarters Fire Rescue Service (Ministry of Interior), Czech Hydrometeorological Institute, State Health Institute, State Office for Nuclear Safety, Red Cross, various research institutes and universities, Czech Association of Insurance Companies, private companies, individual members etc. (The United Nations Office for Disaster Risk Reduction 2013).

As reported by (Bakken and Rhinard 2013) the crisis management system is relatively simple and quite efficient.⁶⁴³ The responsibilities are clear. Crisis management works well at the regional level (crisis staffs formed by both administrative as well as operational bodies' representatives). When up-scaled (subsidiarity) to central level the crisis management works also well (Bakken and Rhinard 2013).

1.2.1 Strategy scope and focus

As stated by the international expert, in Czech Republic, *"the strategic approach is not comprehensive focusing only on limited number of prevention and recovery activities."*

The Czech Republic passed through several severe floods and Early Warning especially for floods is well organized.⁶⁴⁴ An important part of the mechanism to ensure the fulfilment of the activities and objectives of the International Strategy for Disaster Reduction and the Hyogo Framework of Action

⁶⁴¹ https://ec.europa.eu/europeaid/environment-czech-republic_en

⁶⁴² <https://www.unisdr.org/partners/countries/cze>

⁶⁴³ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

⁶⁴⁴

http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/hfa/15505_cze_NationalHFAprogres 2009-11.pdf

framework for the period 2005 - 2015 is the Integrated Rescue System (IRS). IRS is an effective system of links, rules, cooperation and coordination of rescue and security forces, state and local governments, individuals and legal entities in the joint conduct of rescue and relief work and preparing for emergencies and natural disasters.⁶⁴⁵

The bodies of IRS are the Fire Brigade of the Czech Republic, Emergency Medical Services Providers and the Police of the Czech Republic. Other bodies include: Designated powers and resources of the Armed Forces, Municipal Police, Public Health Authorities, Emergency, Expert and Technical Services, Civil Protection Facilities, Non-profit organizations and associations of citizens, which can be used for rescue and liquidation operations. Fire Brigade is the main coordinator and backbone of the IRS. In practice, this also means that in case of intervention of multiple bodies of the IRS, in the place is usually in charge member of a Fire Brigade, which manages and coordinates the interaction of bodies rescue and disposal operations.

Operations and Information Centre of the IRS mobilizes and deploys the necessary forces and resources of IRS in specific locations. At the strategic level is then the IRS coordinated through regional crisis authorities and the Ministry of Interior.⁶⁴⁶

According to the Law on the IRS the commanding officer of the intervention has extensive powers at his disposal. The commanding officer may, among other things, prohibit or restrict the entry of persons to site, order the evacuation of people or decide on other temporary restrictions to protect life, health, property and the environment. Preparedness for flash floods remains, mainly due to its different character from common floods on rivers is still a problem.

The non-existence of a complex disaster reduction plan including all types of disaster is caused by differentiation of responsibilities for different ministries. Another reason is that the most probable kind of disaster in the Czech Republic is floods (over 90 % of all disasters). DDR principles have been included in so-called “flood protection plans” with specific responsibilities (Ministry of the Environment of the Czech Republic 2013).

The main aim of the National Platform is to support all actions leading to reduce human, social and economic losses caused by natural disasters. The following goal is to integrate Disaster Risk Reduction into decision making processes at all levels.⁶⁴⁷

The ministries, in particular of the Interior, Health, Agriculture and Environment fulfil their proper duties based in the national legislation of the crisis management and they apply the activities and objectives of the International Strategy for Disaster Reduction and the Hyogo Framework of Action for the period 2005 – 2015 (The United Nations Office for Disaster Risk Reduction 2013).

The Ministry of the Environment ensures warning and forecasting services according the information issued by the Czech Hydrometeorological Institute, established by the same Ministry.⁶⁴⁸

The National Platform for Disaster Risk Reduction in Czech Republic focuses mainly on:

- supporting of the risk-aware and resilient society able to prevent disasters and to mitigate their impact,
- strengthening legislation on issues related to disaster risk reduction,

⁶⁴⁵ <http://www.unisdr.org/partners/countries/cze>

⁶⁴⁶ <http://www.preventionweb.net/english/hyogo/national/list/v.php?id=46>

⁶⁴⁷ <http://www.unisdr.org/partners/countries/cze>

⁶⁴⁸ <http://www.unisdr.org/partners/countries/cze>

- improving crisis management and international cooperation within the frame of disaster risk reduction,
- improving coordination between governmental, non- governmental and private sector stakeholders in the field of natural hazards and disasters.⁶⁴⁹

1.2.2 Monitoring and analytical support to policy making; R&D

According to the Ministry of Environment (2013) Disaster losses and hazards are systematically reported, monitored and analyses, although a disaster loss database does not exist. Reports are generated and used in planning by finance, planning and sectorial line ministries. Hazards are consistently monitored across localities and territorial boundaries.⁶⁵⁰ Police investigations have often led “nowhere” when responsibility of larger (both state and private) companies has been undertaken after the floods.

Several national and international programs are supporting research on Disaster risk reduction, e.g. the Innovation and Support of Doctoral Study Program (INDOP) as well as other study grant initiatives such as the SGS (Student Guidance Service) projects.

1.2.3 Policy for Prevention

Disaster prevention is coordinated at the level of General Directorate of Fire Rescue Service of the Czech Republic (DG FRS CR) and the regional Fire Rescue Service (FRS). Prevention of crisis situations is mainly linked to protection of critical infrastructure (The General Directorate of Fire Rescue Service of CR 2014).

Some institutions like the Czech Hydrometeorological Institute, Institute for Atmospheric Physics or Water Research Institute of TGM and River Catchment Authorities participate in various projects devoted to flood and disaster reduction. Also some universities participate in such projects and programs (Ministry of the Environment of the Czech Republic 2013).

1.2.4 Policy for Preparedness

Crisis preparedness is provided in the organization (creation of organizational structures, emergency and crisis planning), technical (equipment and other material) and competence (training and education).⁶⁵¹

According to the Czech Government (2005), Multi-Hazard assessment has been done for some areas or cities but not at the level of the whole state. Programs or policies for disaster preparedness, contingency planning and response exist in form of (Ministry of the Environment of the Czech Republic 2013):

- Programs and policies incorporated by DRR.
- The institutional mechanisms for the rapid mobilization of resources in a disaster, utilizing civil society and the private sector in addition to public sector support.

⁶⁴⁹ <http://www.seesac.org/res/files/failovi/545.pdf>

⁶⁵⁰ <http://www.preventionweb.net/english/hyogo/hfa-monitoring/documents/2013-15-National-HFA-Monitor-Guidance-Note.pdf>

⁶⁵¹ <http://www.hzscr.cz/hasicien/article/crisis-management-in-the-czech-republic.aspx>

Many floods in the Czech Republic in the past 15 years, a good system of flood warning and flood protection including “flood plans” for each city and community has been developed, applied and progressively improved. A support from crisis management as well as water (Water Act, Crisis Management Act) legislation has been very important. However, some problems could appear with some other types of disaster which occur very rarely.

Furthermore an anti-flood system in Prague has been finished and also tested. It consists of removable barriers (dykes) together with some new standard dykes in the vicinity of Vltava River. In some communities in the country resilience especially towards flood has been improved while in others has not been improved especially because of a lack of finances. Last two years financing towards increase of resilience has been more difficult because of economic crisis.⁶⁵²

1.2.5 Policy for Response

The General Director of the Fire Rescue Service (2014) states that the Solution to the crisis is related to the implementation of rescue and relief work, the implementation of measures to protect the affected population, emergency survival measures to ensure functional public administration and critical infrastructure.

The Czech Republic has developed a very comprehensive multi-hazard system based on an integrated early warning system connected with a special rescue and response system. The system passed through several tests during real disasters especially floods occurring last 15 years. Also exercises have been organized on regular basis. The system defines clear competencies of all stakeholders and includes also duties of media in such events. These plans, procedures and resources for extraordinary events have been systematically created and could be released for the use by the proclamation of the state of emergency by the Prime Minister (at the state level) and local authorities leaders (at the regional level). Operational and communication centres create a system throughout the whole state and their functionality has been checked either by real disasters like floods or by regular exercises at various levels. Special attention has always been given to potential failures of nuclear power plans.

Exercises and trainings have been organized regularly, however sometimes only some parts of the whole crises management systems are involved in exercises (Ministry of the Environment of the Czech Republic 2013).

1.2.6 Policy for Relief and Recovery

An inclusion of post-disaster recovery especially has been placed in connection with an enhancement of resilience of newly built houses and infrastructure and has been applied only occasionally. The main problem is a lack of money for inclusion of better resilience in future as a part of post-disaster recovery programs. It is rather difficult to incorporate these measures into the programs. Moreover, it is usually very difficult to find another place (land) for building new houses at safer areas (more distance from rivers). It is caused by relatively high population density and complicated orography of the country (Ministry of the Environment of the Czech Republic 2013).

⁶⁵² http://www.preventionweb.net/files/15505_cze_NationalHFAProgress_2009-11.pdf

1.3 Financing

1.3.1 Investing in preparedness

According to the Ministry of the Environment of the Czech Republic (2013) Investments to reduce the risk of vulnerable urban settlements are realized in terms of Investment in drainage infrastructure in flood prone areas and slope stabilisation in landslide prone areas. Nevertheless Training of mason on safe construction technology, Provisions on safe land and housing for low income households and communities, Risk sensitive regulation in land zoning and private real estate developing and regulated provisions of land titling has not been established yet.

Some investments have been realized with financial support from special EU programs

Realization of such projects and programs strongly depends on current regional and local authorities. In some areas a great success can be seen while in others such projects have not been launched yet

As stated in (Bakken and Rhinard 2013) the largest threats to the Czech civil security system stem from its environment: The budgetary cuts resulted in cutting investments and in focusing on “running” the system only. The strongest link is then the functioning of the IRS (including the ability to help abroad) and of crisis management, especially at the regional and also at the state level (when up-scaled to this level) with clearly set responsibilities and procedures (Bakken and Rhinard 2013).

1.3.2 Investing in consequence management

The budget for consequence management mainly depends on state contribution and some projects are covered by the EU. National contingency fund and Catastrophe insurance facilities arrangements are in place to deal with major disasters. Catastrophe bonds are not established yet.

In the absence of adequate flood prevention measures the cost of the damages provoked by increasingly strong floods can be very high. In the Czech Republic, the EIB already financed several reconstruction projects after the catastrophic floods of 1997 (EUR 200 million) as well as the reconstruction of infrastructure (EUR 400 million) and the renewal of Prague’s metro (EUR 80 million) damaged during the 2002 floods (European Commission 2006).

The above mentioned financial arrangements have been established and can be used in declared emergency situations at various levels (state, region, community). Special state reserves of food, material, tools, bridges, fuel, etc., exist and are well maintained for the use in emergency situations (Ministry of the Environment of the Czech Republic 2013).

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Some losses and damages have been assessed by insurance companies, others especially on the infrastructure (roads, railways, electricity lines, etc.) by companies responsible for maintaining this infrastructure and by the state and regional authorities. An agreed method and procedure have been adopted to assess damage, loss and needs when disasters occur.

Special projects analysing recent losses caused by bigger floods have been launched by the government after each such event showing some gaps, losses and also proposals for future

avoiding drawbacks encountered. The reports dealing with evaluation of these floods (Ministry of the Environment of the Czech Republic 2013).

Triggered by recent disasters, the Czech Republic has been prompted to conduct disaster assessment and identify the performance of disaster management. As an example, the floods in Bosnia and Herzegovina, which caused a damage of approximately USD 1.67 billion, have encouraged the Czech Republic to conduct a post-disaster needs assessment and identify shortcomings, e.g. in data accuracy and rapid response capacity. Together with UNEP, the Czech Republic has launched a project aiming at identified gaps in data collection and communication of natural disasters risks in the hydrology sector.⁶⁵³

1.4.2 Departmental Lessons Learned systems

The identified documents on civil security in the Czech Republic do not provide requirements or specific mechanism for learning lessons from emergencies to be established.

1.4.3 Centralised (national) Lessons Learned system

Framework or system for assessing the experience of individual emergencies and disasters is not developed. There are not integrated Lessons Learned systems in individual organisations but rather ad-hoc efforts (Expert Interview 2014).

1.4.4 International exchange for Lessons Learned

A system to exchange lessons learnt systematically is not in place (Expert Interview 2014). The Czech Republic has signed bilateral agreements on cooperation with neighbour countries. All the aforementioned agreements include provisions on mutual exchange of information and early warning in case of major disasters. In the frame of some projects, e.g. the transnational project Ceframe, a harmonised flood management strategy will be developed beyond borders.

In the Czech part of the Morava river basin 583 kilometers of river sections were identified as APSFR. In the Czech part of the Vah river basin (Vlára catchment) 34 kilometers of river sections were identified as APSFR.

1.4.5 Regular policy reviews

According to the Expert Interview (2014), Policy reviews leading to incorporation of findings in the policy process take place. Disaster losses are systematically reported, monitored and analysed, a disaster database which is regularly updated could not be identified. It can be maintained that policy are reviewed only when main disasters have happened. However, Reports are generated and used in planning by finance, planning and sectoral line ministries (Ministry of the Environment of the Czech Republic 2013).

⁶⁵³ Information is available at: <http://www.un.ba/novost/10804/the-czech-republic-and-unep-to-build-capacity-in-disaster-risk-reduction-in-bosnia-and-herzegovina->; accessed: 21st October, 2014.

1.5 Resilience

The concept of resilience in civil protection, in terms of county's capacity to withstand shocks due to natural and other disasters, to rebuild itself with efficiency and to improve on the pre-existing state wherever possible, has not been explicitly established in the Czech Republic by law or other normative act.

However, according to the European Commission (2006) the Czech Government has devised a national strategy to provide protection to the areas at risk, particularly where there are large concentrations of population. The implementation of this strategy has already started and was supported by the European Investment Bank with a first EUR 60 million loan for Flood Prevention. The EIB loan will finance flood protection investment schemes across the whole country contributing to the reduction of the potentially devastating effects of floods and safeguarding human health. The anti-floods measures will substantially improve the security of the population living in the five Czech river basins (Morava, Labe, Ohre, Odra and Vltava)⁶⁵⁴. As these territories are part of the European catchment area discharging water into the Black, North and Baltic Seas, they will also have significant cross-border effects with positive implications for people living along respective rivers in neighboring countries.

Individual actions supported by the loan will cover for example the construction or maintenance of reservoirs and dams, including dry reservoirs, the increase of the flow capacity of watercourse channels, protective dams, discharge channels and tunnels, etc. The Czech Ministry of Agriculture will be the promoter of the flood prevention measures, while local authorities involved in water management, e.g. River Boards, Regions and Municipalities as well as pond managers will be the final beneficiaries of the loan.

Additionally the experience of the Czech Republic Puncuchar, P. (2012) stated that the flood management and the flood prevention lead to the following most important activities/actions:

- *The adoption of strategic (conceptual) documents and relevant legislation for improvement of flood prevention*
- *The improvement of the advanced forecast and early warning systems using high-tech procedures and equipment (radar, ALADIN, mathematical models of run-off etc.)*
- *The implementation of a robust information systems for dissemination of data from databases of water management bodies and fire-brigades using modern communication technologies (internet, mobiles, TV, wireless)*
- *Well prepared activities of bodies responsible for flood, rescue and crisis management (flood commissions, crisis committees, mayors, municipalities), which follow from appropriate legislation for the flood prevention and flood defense*
- *Continuous upgrading of flood plans and activity of flood commissions, their training and checking the communication between the bodies responsible for flood management and flood protection activities*

⁶⁵⁴ <http://www.eib.org/infocentre/press/releases/all/2006/2006-142-czech-republic-czk-9-billion-for-flood-prevention.htm>

- *The identification of flood areas (including determination of “active zones”) and transfer these information to the inhabitants (namely in small municipalities)*
- *The realization of flood protection measures combining structural technical, non-technical (nature plausible) measures as well as improvement non-structural measures*
- *Well prepared management of flood flow rates by use of manipulation on dam-reservoirs, polders, removable walls installation etc.*
- *Development of the close collaboration with the neighboring countries on flood management and on realization of flood defense measures in integrated plans of respective watershed. Puncuchar, P. (2012)*

1.6 Information sharing and data protection

Collection and protection of personal data related to disaster management, in the Czech Republic could not be identified in the entire documents of Crisis Management in the Czech Republic. However, The Ministry of Interior fulfils the task in the area of critical infrastructure resulting from the membership of Czech Republic in the European Union, provides international exchange of information in this area, serves as the contact point of the Czech Republic in the frame of European critical infrastructure and submits the European Commission reports on tasks of implementation arising from the EU legislation in this area (Government of the Czech Republic 2010). As indicated by ICPDR (2012), public communication and information is partly provided by Flood Information System POVIS, www.povis.cz, where relevant information and documents about implementation of the Directive 2007/60/EC on the assessment and management of flood risks (2007) is provided to the public.

Therefore the Czech Republic joins the Euro Atlantic Partnership Council (EAPC), which provides a framework for Planning and Review Process (PARP) in which framework the Czech Republic and NATO define and achieve partner goals. Furthermore, NATO Committee meetings at least twice a year serve as a platform for sharing knowledge and experience between the heads of their national civil emergency planning organisations and by members of national delegations at NATO.

Beyond the above mentioned The Czech Republic has International bilateral co-operation in the flood prevention as states in the following (Puncuchar, P. 2012).

Cooperation with the Federal Republic of Germany

As stated in (Puncuchar, P. 2012) the Czech Republic shares with Germany the longest international boundary. The author mentions also that the transboundary waters are split into regional waters (Saxon boundary and Bavarian boundary). The Czech Republics' cooperation with Saxon lasts since 1955 and the cooperation with Bavaria since the 1970s. Flood protection, which is the main activity, is involved in expert groups 1 and 3 (Water Management Planning and Balancing, Hydrology) according to (Puncuchar, P. 2012).

Cooperation with the Republic of Poland

The Czech Republic has also a cooperation with the Republic of Poland (since 1958) corresponding to. Therefore the Polis Institute of Meteorology and the Czech Institute of Hydrometeorology are working together on the topics hydrology, hydrogeology and flood protection. The co-operation has

led to improvements in forecasting services, flood warning and the implementation of meteorological forecasting models. (Puncuchar, P. 2012)

Cooperation with the Republic of Austria

In 1928 the Joint Technical Commission was established and since then the cooperation with the Republic of Austria is ongoing. The actual convention was signed in 1967. The problems discussed in this cooperation are quality and quantity of water, water abstraction and the maintenance of watercourses. Assessing impacts of reservoirs on conditions in transboundary reaches was a task of the commission for a long period in the course of the cooperation. This includes the improvement flood management. (Puncuchar, P. 2012)

Cooperation with the Slovak Republic

Between the Czech Republic and the Slovak Republic there is a cooperation dealing with the managing of transboundary waters. This cooperation was preliminary agreed in 1992 before the division of the Slovak and Czech Federative Republic in 1993. The cooperation includes management of watercourses, assessment of water quality and flood protection. (Puncuchar, P. 2012)

2 Legislation

The country takes an all-hazard approach and the key functions of the civil security system are embedded in two acts: The Crisis Act and the Act on IRS. A general anchor for these is the Constitutional Act on Security. The leading institution in civil security police making is the Mol. The General Directorate of the Fire Rescue Brigade is then responsible for civil security, including research and education. The main responsibility for the implementation for dealing with crisis rests upon the regions. (Bakken and Rhinard 2013).

2.1 Crisis (emergency, disaster) management concept

The most important documents on crisis management in cases of natural and other disasters are:

- The Law on Crisis Management No. 240/2000
- The Law on Integrated Rescue System No. 239/2000.

These two laws define the responsibilities of the Government, the Central Administrative Offices and the Territorial Administrative Offices plus elements of the Integrated Rescue System. In addition, they stipulate crisis preparedness measures and the limitations that apply to individual rights during crisis. It provides also a set of common principles on how should protection, secure and relief organised throughout the civil protection system. It also stipulates operational guidance to all professional and volunteer, national and local, state and private forces that based on law or other forms of organised engagement contribute to all or each aspect of protection against natural and other disasters. The Law on Crisis Management and the Law on the Integrated Rescue System cover all levels of government, from national to local. International intervention is governed by political agreements, for example with neighbouring countries.

Besides these two laws are the law on The Law on Securing the Defence of the Czech Republic and the Law on Economic Measures for Solving Crisis Situations related to Crisis Management

- The Law on Securing the Defence of the Czech Republic.

This law, which came into force in December 1999, stipulates the tasks and responsibilities of the Central Administrative Offices, the Territorial Administrative Offices and legal bodies and citizens in order to meet the defence requirements.

- The Law on Economic Measures for Solving Crisis Situations.

This law determines the preparatory economic measures to be taken in crisis situations and adopts economic measures after a crisis situation announcement.

2.2 General crisis (emergency, disaster) management law

The principles of crisis management are codified in the Act No. 240/2000 Coll. on Crisis Management and amending certain acts (the Crisis Act), as amended.⁶⁵⁵

2.3 Emergency rule

According to Art. 5 of the Constitutional Act on the Security of the Czech Republic (No. 110/1998 Sb.; amended by No. 300/2000 Sb.), a state of emergency may be declared by the Government of the Czech Republic under the circumstances of natural catastrophe, ecological or industrial accident, or other danger which to a significant extent threatens life health, or property or domestic order or security. Art. 3 determines, that the extent of the military service obligation, the duties of the armed forces, of the armed security corps, of the rescue corps and accident services, their organizations, preparation, and supplementation, and the legal relations of their members shall be laid down by statute in such a way as to ensure civilian control of the armed forces. "If delay would present a danger, the Prime Minister may declare a state of emergency. Within 24 hours of the announcement thereof, the government shall either ratify or annul his decision."

Special legal conditions apply when a state of emergency is declared. Along with the declaration of this state, the government must strictly delineate which rights will be restricted (in accordance with the Charter of Rights and Freedoms) and to what extent. Declaration of the state of emergency is a part of functional crisis management. None of the declarations has so far provoked complaints (Bakken and Rhinard 2013).

The Constitutional Act on the Security of the Czech Republic limits the state of emergency to a duration of maximum 30 days (extension is possible only with the consent of the Assembly of Deputies). "A state of emergency ends upon the expiry of the period for which it was declared, unless the government or the Assembly of Deputies decides to annul it prior to the expiry of that period."

Art. 12 of the Constitutional Act on the Security of the Czech Republic determines, that a decision to declare a state of emergency, a condition of threat to the State, or a state of war shall be made public by means of the mass media and shall be promulgated just like a statute. It enters into effect at the moment provided for in the decision.

Based on this law, a state of danger can be declared to overcome unfavorable trends of situation development. The state of danger can be declared by the regional governor as an urgent measure, when lives, health, property, and environment are threatened, provided the intensity does not reach the danger of considerable extent, and it is not possible to avert threats by normal activities of administrative authorities, regional and municipal bodies, IRS (Integrated Rescue System) bodies or entities of critical infrastructure. The Crisis Act also processes relevant regulations of the European Union and modifies specification and protection of European critical infrastructure (Government of the Czech Republic 2010).

⁶⁵⁵ <http://www.hzscr.cz/hasicien/article/crisis-management-in-the-czech-republic.aspx>

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Aspects on legislation in emergency and disaster management are tackled by the document (Government of the Czech Republic 2010). The report contains the following paragraph:

“The crisis legislation and particularly the Crisis Act (nr. 240/2000 Coll.) stipulates the rights and obligations of the population in the state of crisis. In this way, the right to information about prepared crisis measures to protect life, health and property is ensured. The obligations, on the other hand, are relatively generally stated and do not represent an essential part of the functioning of the civil security system. The essential obligation is to – in the state of crisis – obey the call of responsible authorities of crisis management to carry out imposed labour duty; to provide requested material means; or to accept restrictions stemming from crisis measures. A person can reject these obligations should the fulfilling of these endanger his/her life and health or the life and health of other people or if the obligations are against the law.(Government of the Czech Republic 2010)

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Executive responsibility primarily rests at the regional level, although also at the local level; mayors of municipalities are responsible for crisis planning and crisis preparedness in their municipalities. At all levels of administration, there is a legal requirement to form a security council. When conducting rescue or disposal works, the services of the IRS are obliged to follow the orders of the commander in place (usually from the fire brigades) or of the mayor of a municipality with extended powers or of the regional president or of the MoI. The regional president has the power to call a state of danger for the region or its part for the time of maximum 30 days with the obligation to inform the MoI. (Government of the Czech Republic 2000)

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Within the Act No. 239/2000 Coll. from the parliament of the Czech Republic on integral rescue systems the role of citizens is specified. Descriptions are given independently for the emergency management system as well as the crisis management system. For emergency management system, role of citizens are defined by responsibilities, rights and obligations of citizens in general as well as by institutions having responsibilities as secondary units of the Integrated Rescue System (IRS). Civil protection organisations, NGOs and civic associations are considered as integral part of the IRS. Such organisations are only activated in case of request (Parliament of the Czech Republic 2000).

Moreover, persons exempted from labour obligation or labour assistance can provide voluntary assistance. The crisis management authority, which decided about restriction of the right or imposed the obligation, is obliged to pay financial compensation. (Swedish Civil Contingencies Agency 2009)

2.7 Legal regulations for international engagements of first responders and crisis managers

According to (Bakken and Rhinard 2013) the Czech Republic has established a bilateral cooperation with all its neighbours Countriesand. Regional, multilateral and cross-border regional agreements exist to facilitate cooperation in the case of crisis. The country actively participates in the EU mechanisms for disaster assistance and at EU crisis-response exercises. The country is traditionally providing rather than receiving assistance.⁶⁵⁶

The Czech Republic has been cooperating on flood protection and warnings by means of participation in Elbe, Oder and Danube river commissions. National platform cooperates closely with the platforms from Germany, France and Poland in the framework of European network of national platforms (ENNP). Some projects have been submitted to European Commissions but have not been approved yet. In November 1 and 2, a special Workshop devoted to Flash Floods and early warning organized by the Czech platform, ENNP and the Czech Hydrometeorological Institute will take place in Prague. The Czech Republic shares catchments of some rivers and closely cooperates with its neighbours especially in data and warning exchange (Ministry of the Environment of the Czech Republic 2013).

Financial compensation belongs to the legal or natural undertaking entity for restriction of the right of ownership or the right of use, for provision of material assets, performance of labour obligation or labour assistance. The crisis management authority, which decided about restriction of the right or imposed the obligation, is obliged to pay financial compensation. Based on mutual agreement financial compensation can also be provided for voluntary labour assistance. According to this clause financial compensation shall be paid within 6 months after termination or cancellation of the crisis state, in the consequence of which the claim for the financial compensation arose.

In case of labour obligation, labour assistance or voluntary assistance where the amount of compensation cannot be determined by the agreement or in accordance with special legal regulations, compensation is determined in the amount corresponding to usual wage for the same or similar work. Determination of compensation for providing material assets is based on the amount of expenses incurred to the obliged person and on usually required compensation for use of the same or similar material means at the time of provision. Crises management authority is entitled to request reimbursement of expenses incurred as compensation for provision of material assets, performance of labour obligation, labour assistance or voluntary assistance, from the inflictor of the accident) or other event, which caused the crisis situation and crises measures had to be ordered. Incurred expenses) are compensated by this reimbursement (Bakken and Rhinard 2013).

⁶⁵⁶ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

3 Organisation

The role of main focal point fulfils the Department of Security and Crisis Management at the Ministry of the Environment of the Czech Republic and as the second focal point serves the Department of International Relations at the Ministry of the Environment of the Czech Republic.

The Ministry of the Environment is coordinating all activities in the field of fulfilling the tasks of Hyogo Framework for Action. The Ministry of the Interior is a lead coordinating institution for disaster risk reduction. An important part of the Czech system, which ensures the practical application of the activities and objectives of the International Strategy for Disaster Reduction and the Hyogo Framework of Action for the period 2005 - 2015 is the Integrated Rescue System (IRS). IRS is an effective system of links, rules, cooperation and coordination of rescue and security forces, state and local governments, individuals and legal entities in the joint conduct of rescue and relief work and preparing for emergencies caused by natural disasters.⁶⁵⁷

Ministry of the Environment of the Czech Republic and different representatives and experts from the above mentioned institutions are attending joint meetings of the National Platform for Natural Disaster Reduction which take place 2-3 times a year, and are discussing main issues and activities related to the field of disaster risk reduction and prevention (The United Nations Office for Disaster Risk Reduction 2013).

3.1 Organisational chart

The Czech Republic is a parliamentary democracy. The Cabinet, consisting of the Prime Minister and the Ministers, performs the executive powers. The Cabinet, appointed by the President, is responsible to the Chamber of Deputies. The bicameral Parliament consists of the Senate and the Chamber of Deputies.⁶⁵⁸

The National Security Council of the Czech Republic is the governmental advisory body for the security of the Czech Republic. The chairperson is the Minister of the Interior. The other members of the National Security Council are appointed heads of assigned ministries.

To ensure its tasks, the Council has established four permanent working committees. Their responsibilities were assigned by a Government decision in 1998:

- The Defence Planning Committee
- The Civil Emergency Planning Committee
- The Foreign Security Policy Co-ordination Committee
- The Intelligence Activities Committee.

⁶⁵⁷ <http://www.unisdr.org/partners/countries/cze>

⁶⁵⁸ <http://documents.mx/documents/civil-emergency-planning-in-the-natoeapc-countries.html>

The responsibility for Civil Emergency preparedness in all administrative bodies lies with the statutory representatives. Existing Civil Emergency departments operate in both Central Administrative and Territorial Administrative Offices.⁶⁵⁹

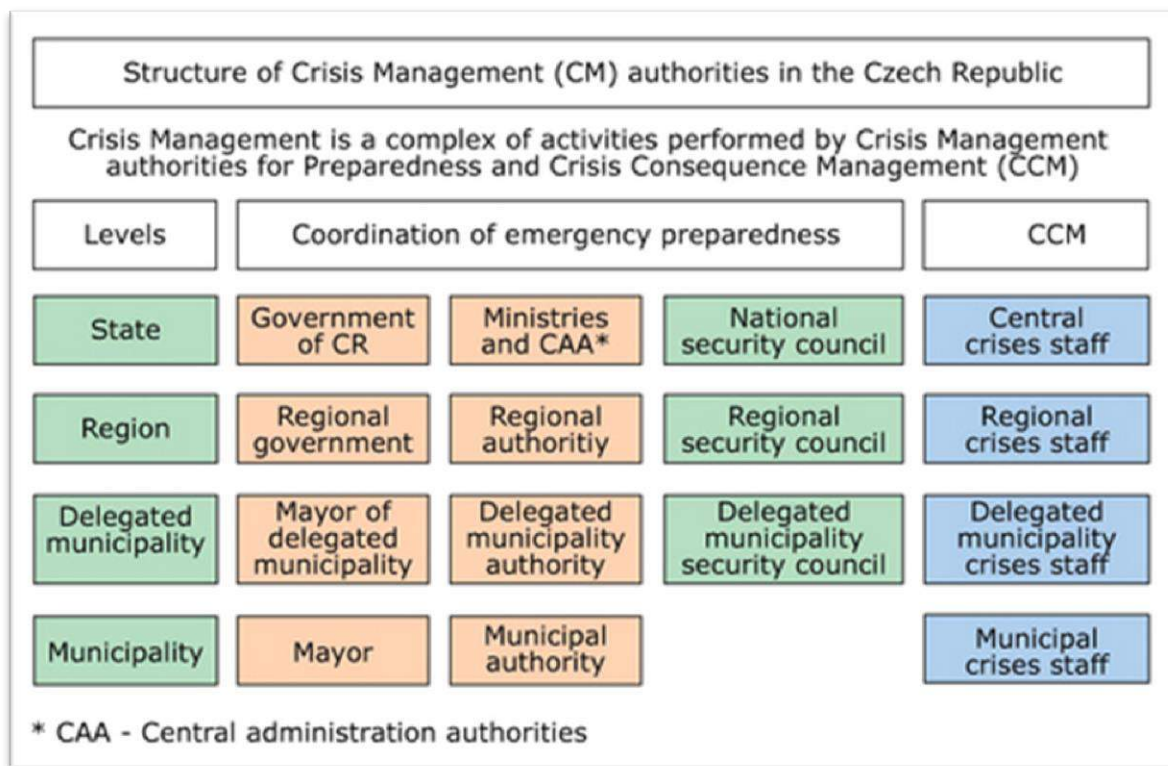


Figure 85. Crisis Management Authorities of the Czech Republic.

The present structural setup:

⁶⁵⁹ <http://documents.mx/documents/civil-emergency-planning-in-the-natoeapc-countries.html>

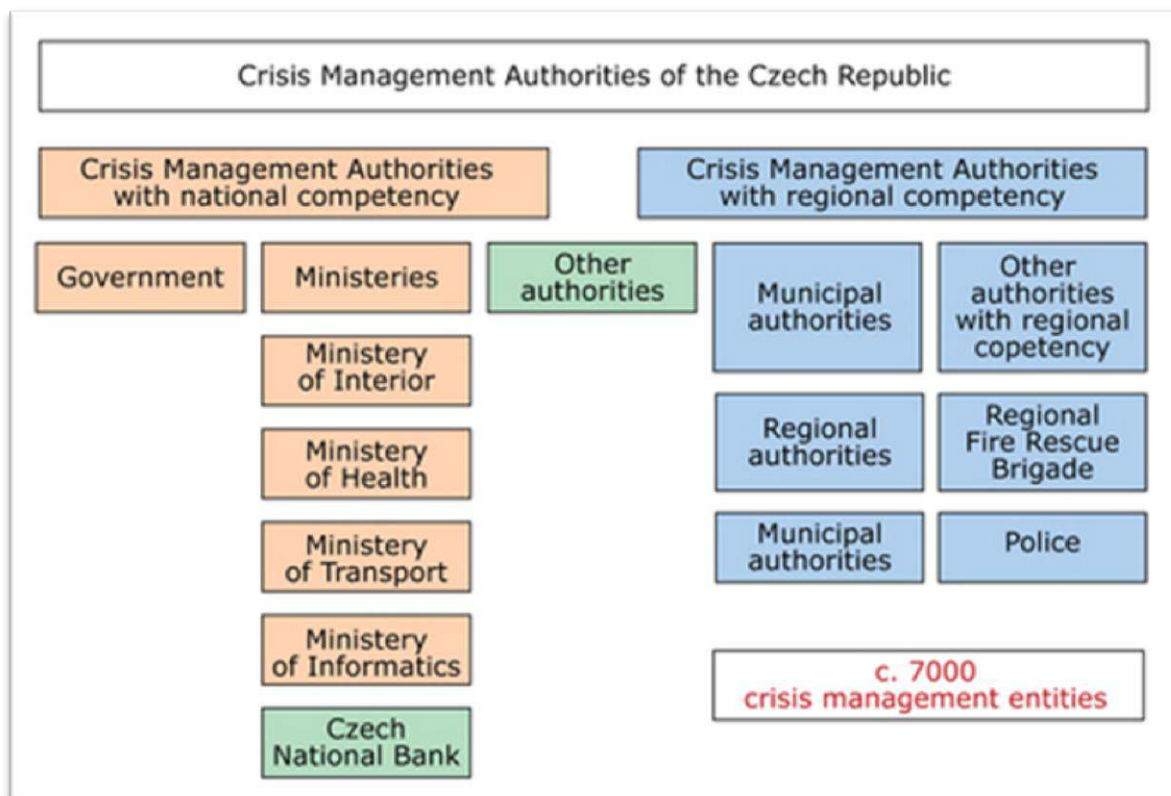


Figure 86. Structure of Crisis Management authorities in the Czech Republic.

- At national level: The Ministry of the Interior (MOI) cooperates with other central administration bodies including municipal authorities in the field of civil protection
- At regional and local level: The regional and municipal authorities work in close cooperation with the central level
- At international level: The MOI coordinates civil protection both at national and international levels and provides future policy guidance and directions for the civil protection process

The role of the Ministry of the Interior (MOI) during non-military crisis situations is to coordinate activities at the inter-ministerial level. The responsibilities of the MOI in non-military crisis situations are the same as the responsibilities held by the Ministry of Defence in military crises. Military forces support civil authorities in emergencies, i. e. when the resources of the local and regional units are inadequate. This support is provided to the Fire Rescue Corps, to the Police and to local authorities.⁶⁶⁰ Assistance from the Ministry of Defence is provided in the form of army troops or in cooperation with Civil Protection Rescue Bases. In military crisis, the civil protection provides all the necessary civilian resources for the army. (European Commission 2014)

- Departmental emergency and disaster management arrangements

The civil security system is rather decentralized. Authority and responsibility for crisis preparation and response rest at the regional level. A state of danger can be declared by the regional council president (hejtman) for the whole region or its part, for a period of maximum 30 days when there is a

⁶⁶⁰ http://ec.europa.eu/echo/files/civil_protection/vademecum/cz/2-cz-2.html

natural disaster, ecological or industrial accident or if life, health or property of citizens is threatened. When a crisis cuts across the regions, the central government assumes responsibility. Up-scaling to a higher degree, then, is the state of emergency which is called by the government for a period of maximum 30 days. The reasons are the same as in the previous case; however, the scale of the disaster must be here “significant”. Typically, the state of emergency is declared when two or more regions are affected by a crisis. (Krulík 2011)

- Local authorities and arrangements for emergency and disaster management

Mayors of municipalities are responsible for crisis planning and crisis preparedness in their municipalities. At all levels of administration, there is a legal requirement to form a security council. When conducting rescue or disposal works, the services of the IRS are obliged to follow the orders of the commander in place (usually from the fire brigades) or of the mayor of a municipality with extended powers or of the regional president or of the Mol. The regional president has the power to call a state of danger for the region or its part for the time of maximum 30 days with the obligation to inform the Mol. (Act Nr. 239/2000 Coll.)

- Volunteers and volunteer organisations; specialised NGOs

The Voluntary Fire Brigades (VFB) are an important part of the Czech civil security system. They have a long tradition in the country and more than 300,000 members. They are also seen as a large potential also for the future. They are an official part of the IRS (as one of the “secondary” bodies) and are involved in official exercises.

- Private businesses

Legal persons are obliged to prepare for emergencies and to participate in the preparation of emergency plans and to provide assistance during a crisis when requested. They can be asked to do so by the regional president or by the mayor of the municipality. (Act nr. 240/2000 Coll., §29)

In the field of civil security provision, the absolute majority of bodies are public ones. As an example of private bodies, for-profit health rescue services can be mentioned. These are typically smaller than the health rescue services which are established by the regional authorities. They specialize e.g. in the transportation of patients or assist at various cultural and sporting events (paid by the organizer). Usually, one such organization exists in every region although they do not necessarily have an agreement with the regional authority or all health insurance companies.

Being an integral part of the IRS, the flight rescue services must be mentioned as well. Currently, there are 10 stations facilitating air rescue. This represents a very dense network (one of the densest in Europe) covering an overwhelming majority of the territory of the country. (Fojtík 2011) The flight rescue services are operated both by private (eight stations) and by state (two stations) bodies. The latter ones are operated by the Police Air Service and by the army. (DSA undated) So far, there have been no criticisms on the functioning of the flight rescue services (Bakken and Rhinard 2013).

3.2 Organisational cooperation

According to (Bakken and Rhinard 2013) the civil security is provided by the so called IRS which is an operating platform to respond to crises. The IRS is made up from three main agencies:

- the fire brigades
- the health emergency services and
- the police.

Usually they operate at the regional level. (Bakken and Rhinard 2013)

The aim of civil protection in the Czech Republic is, by means of planning, coordination and management precautions, to ensure the preparedness of the state to prevent and manage emergencies and crisis situations threatening the population.

The primary scope and focus of civil protection is to cooperate especially in the following areas:

- Performing tasks related to the protection of the population
- Ensuring the continuous function of the state administration, national authorities and municipal authorities
- Ensuring an acceptable form of social and economic life
- Safeguarding the functionality of critical infrastructure
- Enhancing cooperation between the public and private sectors
- Ensuring the availability of civil resources necessary to ensure security
- Taking measures against weapons of mass destruction used against the civilian population
- Coordinating security research
- Coordinating education in the field of crisis management and the protection of the population
- Planning and assessment of exercises performed by crisis management authorities
- Providing and receiving humanitarian aid and rescue operations
- Solving specific problems and coordinating effective systems of communication with the public as an integral part of the preparedness of the Czech Republic to crisis situations
- Enhancing problem-oriented communication and information systems
- Ensuring civil support of armed forces and security corps activities including coordination of requests for armed forces
- International cooperation in the fields mentioned above.

The responsibility for Civil Emergency preparedness in all administrative bodies lies with the statutory representatives. Existing Civil Emergency departments operate in both Central Administrative and Territorial Administrative Offices.

As reported by (Bakken and Rhinard 2013) the Czech Republic has established bilateral cooperations with all its bordering countries - chronological with Austria and Slovakia in 1998, with Hungary in 1999, and with Poland and Germany in 2000.. All of these agreements are treaties under international law on help and cooperation in the time of catastrophes and large disasters. (MFA 2005)

As stated in (MFA 2006) additional agreements were made. The country has signed regional and multilateral provisions: it is a member of the Council of Europe, the EU, NATO, the OSCE and the UN. The Czech Republic is also a party to the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations of 1998 (effective since 2006) and the 1992 Helsinki Convention on the Trans-boundary Effects of Industrial 147, Accidents (effective since 2002). Coordinating bodies for providing aid in the times of catastrophes in other countries are the MoI and the MFA.

In relation to (State Office for Nuclear Safety online) the Czech Republic is party to the Vienna Convention on Civil Liability for Nuclear Damage. The Czech Republic is also a party to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, Convention on Early Notification of a Nuclear Accident and the Convention on the Physical Protection of Nuclear Material (effective since 1993).

Besides international agreements, also cross-border regional agreements exist to facilitate cooperation in the case of crises as the floods or the storms Kyrill and Emma. This cooperation takes on different forms. Official methods of cooperation exist between the Czech Republic and Poland. With Slovakia a similar document exists according to (Prudil 2014).

Agreement on Mutual Cooperation between the Fire Rescue Brigade of the Karlovarsky Region and the German THW Chemnitz (in effect since 2005) is another example. Similar cross-border cooperation can be found in the border regions with all three other bordering states. (Volf 2013) For example “protection against catastrophes” has been an integral part of the Agreement of Cooperation between the Federal Country of Lower Austria and the South Moravian, South Bohemian and Vysocina regions. The Czech region of Southern Bohemia also has similar agreement in place with Upper Austria. (Dohoda 2011)

Only recently, in April 2013, a framework agreement on the cross-border cooperation of the health rescue services was signed between Germany and the Czech Republic. This agreement, signed by the ministers of health of both countries, is a first of its kind in the field of health. It concerns two German federal states (Bavaria and Saxony) and five Czech regions (Liberec, Usti, Karlovy Vary, Pilsen and South Bohemia). In case of a crisis, the backbone of this agreement is the governmental agreement between the Czech Republic and Germany on mutual assistance in disasters and major emergencies. In the coming years, a similar agreement to be signed with Poland is expected (TV RTM 2013).

At the local level in the cross-border regions, cooperation can be found as well although usually focused more broadly to include such areas as environment or regional development. An illustrative example provides the agreement on cooperation between two Czech towns, Rumburk and Varnsdorf, and their two German counterparts, Seifhennersdorf and Großschönau. The agreement was signed by the mayors of these towns in February 2013. One of the areas of cooperation being fire protection and security, especially during emergencies such as natural catastrophes, floods, wild fires, etc. (Bakken and Rhinard 2013).

In general, priorities at strategic level are assigned by Fire Rescue Service of the Czech Republic at central and regional levels (Expert Interview 2014).

4 Procedures

In the Czech Republic, very detailed descriptions of procedures are available, which are widely acknowledged by authorities.

According to the Crisis Act, the preparedness for crises and their management is coordinated by the MoI. The GD FRB (which is a part of the MoI) ensures through its regional offices and territorial districts an efficient coordination of the preparation for crisis situations and their management at the regional, municipal and local level. The regional fire rescue brigades are responsible for crisis preparedness and management in cooperation with municipal bodies. (Plzeň city website)

At the regional level, the regional president (*hejtman*) is responsible for crisis management. He/she chairs the security council of the region (a permanent body) and the crisis staff of the region (non-permanent body, called upon a crisis or exercise thereof). Every region (the regional president's office) has a crisis management department or similar. This is (among other) responsible for analyzing the information for the regional president, informational support to the municipalities with extended powers, coordinating of crisis management and planning of the municipalities with extended powers and for analysis and evaluation of exercises for crisis situations. (Pardubice Region Website)

Members of the security councils and crisis staffs, mayors of municipalities and bodies of the IRS are informed about the emergence of a crisis by the fire and rescue brigades through operational and information centres (regional and sectorial). Crisis communication then runs through commercial mobile network with a negotiated priority of connection for specified phone numbers when a crisis state is declared. Routinely, information (e.g. meteorological warnings) is provided through the WAP server of the Fire and Rescue Brigades with a text-message notice. Increasingly, an Automated Message Delivery System is used for disseminating information notices and calling of the security councils and crisis staffs.

4.1 Standing Operating Procedures (SOPs) and Guidelines

The principles of crisis management are codified in the Act No. 240/2000 Coll. on Crisis Management and amending certain acts (the Crisis Act), as amended. Based on this law, a state of danger can be declared to overcome unfavourable trends of situation development. The state of danger can be declared by the regional governor as an urgent measure, when lives, health, property, and environment are threatened, provided the intensity does not reach the danger of considerable extent, and it is not possible to avert threats by normal activities of administrative authorities, regional and municipal bodies, IRS (Integrated Rescue System) bodies or entities of critical infrastructure (The General Directorate of Fire Rescue Service of CR 2014).

Humanitarian aid in the region is then organized by the regional fire rescue brigades. If the regional measures are not sufficient, help can be requested from the central level, from the GD FRB under the MoI. During crises, material help can be also requested from the Administration of State Material

Reserves. Also the participation of NGOs and citizens' initiative is expected.⁶⁶¹ This is coordinated by a standing working group of the crisis staff. (Conception of Civil Protection 2009)

4.2 Operations planning

Civil protection plans are controlled by the General Directorate (DG), the Fire Rescue Service (FRS) and the regional FRS. Operational organisations and civil protection authorities are all part of the DG Fire Rescue Service and operate as one organisation.⁶⁶² The Fire Rescue Service has a unified approach to all kinds of emergencies. Other authorities could be involved according to the type of emergency. (European Commission 2014)

The Czech Republic has established a relatively good system of flood warning and flood protection including "flood plans" for each city and community has been developed, applied and step by step improved. A support from crisis management as well as water (Water Act) legislation has been very important. Also some main made disasters like nuclear events are well covered and regular exercises organized. The recent exercise took place in September 2010. However, some problems could appear with some other types of disaster which occur very rarely

Plans, procedures and resources for extraordinary events have been systematically created and could be released for the use by proclamation of state of emergency by the prime minister and local authority's leaders at state and regional levels. Operational and communication centres create one system throughout the whole state and their functionality has been checked either by real disasters like floods or by regular exercises at various levels. Special attention has always been given to potential failures of nuclear power plants

4.3 Logistics support in crises

The Organisation ASMR provides a coordination role in planning and supporting emergency economic measures. As a matter of priority, the ASMR makes use of material resources of private business entities, and, according to requirements by subject-matter Ministries, the ASMR generates and manages material reserves in commodities, whose ordinary production would not cover for increased consumption in state of crisis/emergency (Administration of State Material Reserves- Czech Republic 2009).

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The crisis communication is well organized and standardized. The Electronic Communications Act, No. 127/2005 includes a paragraph for the communication with public (2005). It has been explained by the expert, that situational awareness is ensured through an integrated information system at all administrative levels with efficient information provide to population (2014).

The primary means of informing the public about an immediate crisis are sirens, including mobile devices. The "general warning" tone (oscillating tone lasting 140 seconds) is currently used for all

⁶⁶¹ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

⁶⁶² http://ec.europa.eu/echo/files/civil_protection/vademecum/cz/2-cz-1.html

kinds of danger. Prior to 2002, different tones were used in connection with different hazards. The warning signal is followed by verbal information (e.g. “danger of flood wave”, “chemical accident”, etc.). There are about 6,000 sirens installed in the country.⁶⁶³ In places not covered by the warning signal, the municipality ensures alternative warning through mobile devices of the IRS (fire rescue brigade of the region, police of the Czech Republic) or by a personal notification (through members of the voluntary rescue brigades of the municipality or municipal police).

When a crisis appears, warning is technically provided with the help of the so-called Integrated Alert and Warning System—a system of notification centers located with the fire rescue brigades and other entities involved in the integrated warning system. The system was designed to speed up and improve possibilities of informing citizens in crisis situations. Information comes to the centers from the crisis staff or from rescue services or other entities. Information is collected and notification to citizens is then made through sirens, TV and radio, outdoor speakers and sent through mobile phones and pagers. The notification centers operate at four hierarchical levels: central level (placed with the GD FRB for emergencies beyond the territorial reach of the regional centers; regional level; local level (placed with territorial departments of the fire rescue brigades); and the fourth level (located e.g. with the controlling departments of facilities which can impose serious damage, such as chemical plants) (Bakken and Rhinard 2013).

For early warning the Czech Republic has established the following towards professionals:

- ECURIE (Radiological/Nuclear)
- RAS BICHAT
- MIC
- EADRCC
- IAEA.

These systems are integrated within the civil protection system through the Operational and Informational Centre of the DG Fire Rescue Service of the Czech Republic.

The system consists of:

- Controlling workplace
- Electronic sirens with a controlling unit
- Appliance for transmitting radio signal to control sirens and verbal information transfer.

Operative information is exchanged via walkie- talkies, specialized electronic tools for data exchange on the internet and video conferences. Several web pages exist like the web page of the Czech Hydrometeorological Institute, Fire and Rescue Service, River Catchment Authorities. Also the Czech Flood Commission under the Ministry of Environment has special web pages for floods and flood warnings (Ministry of the Environment of the Czech Republic 2013).

⁶⁶³ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

5 Capabilities

In the Czech Republic, an important role is played by the VFB. In 2012, this organization had 345,455 members (including 46,426 children and youngsters). There are 7,810 VFB at the municipal level, 77 district units and 14 regional units of VFB. VFB are typically established by the municipalities and financed mostly through grants from the MoI and the regions. The role of the VFB is also in rescue works and civil protection.

VFB are an important part of the IRS.⁶⁶⁴ Especially during floods, the VFB participate in evacuation, warning and humanitarian help. They are also trained and involved in exercises of the IRS. The members of the voluntary firefighters are also assigned to enterprise units such as chemical plants. (Union of Fire Fighters online)

Another important institution from the civic sector is the Czech Red Cross (CRC). In civil security, it focuses most importantly on first aid – both in a form of educational and training activities as well as actual provision of first aid at different events; search for missing persons after emergencies; and on humanitarian aid and disaster relief. In the field of first aid, the CRC is the main actor from the civic sector⁶⁶². The number of members and volunteers (excl. employees) was 27,060 in 2011. The organization operates on the whole territory of the country. It has 70,381 members working in 1,712 local groups. Local groups (municipal level) are the cornerstone. On a higher level, there are 76 district associations. At the top of the organization is then the National Society of the CRC. There are no regional associations – one of the district associations is authorized to deal with regional institutions in every region. (CRC online)

5.1 Human resources

In case of a major disaster, a central Crisis Staff at municipal, regional or even national levels is called upon who will give orders to an on-site commander. The Czech Republic has an "Integrated Rescue System" composed of the Fire Rescue Service, the Police, the Medical Rescue Service, NGOs, the municipal police and others. Commands on site are given by the authority with the largest part in the emergency response.

In the Czech Republic there is a long tradition of voluntary fire brigades with over 300,000 members. Since democratization in 1989, voluntary activities started to develop and to be organized on a professional basis. Volunteering is now seen as an integral part of the new 'information/ post-industrial' society in the Czech Republic. As stated by (Bakken and Rhinard 2013) the new volunteers exhibit a short-term, occasional approach to volunteering. Typically, the floods create large waves of solidarity with people helping in the affected areas. E.g. immediately after the floods in 2002, 45,000 donors and volunteers were registered. Other thousands of people were donating through phone-lines or SMS messages. Some other local civic organizations focusing at first aid exist as well (e.g. the professional Association of First Aid based in the town of Kladno in central Bohemian Region), yet they are far less important – e.g. the mentioned one has 15 members) (Red Cross EU Office 2013)

⁶⁶⁴ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

In line with (Bakken and Rhinard 2013) the CRC was typically involved during the floods of 2006: The main crisis staff of the CRC was called on 29th March 2006. The crisis staffs of the local groups cooperated with local authorities in the affected territories, e.g. in České Budějovice, Český Krumlov, Písek, Prachatice, Jindřichův Hradec, Liberec etc. The Red Cross initiated a collection aiming at post-flood assistance to the people. There are also other NGOs active partially in the field of civil security – mostly in organizing money or material collections and voluntary help. The best examples here are the ADRA organization and Caritas which participated in the post-flood assistance. However, the scope of these organizations is much broader and the assistance during crises is not their main focus. There is no official data on the exact number of active members. Typically, all of the mentioned NGOs are not directly financed by the state but they get part of their funding through projects which are financed by the state (by the ministries of Interior and Foreign Affairs in this case).

Legal persons are obliged to prepare for emergencies and to participate in the preparation of emergency plans and to provide assistance during a crisis when requested. They can be asked to do so by the regional president or by the mayor of the municipality. (Act nr. 240/2000 Coll., §29) Cooperation and crisis preparedness, however, have not always gone smoothly. E.g. during the floods of 2002 the Spolana Neratovice plant was flooded, leading to leakage of chloride. In the vicinity of the chemical plant, the highest degree of chemical danger had to be declared. Police closed roads and firefighters sprinkled the area with water mist which would “pull” the gas to the ground. Although the responsible company was sued for the leakage, the case was put to a halt. (Baroch 2004)

In the field of civil security provision, the absolute majority of bodies are public ones. As an example of private bodies, for-profit health rescue services can be mentioned. These are typically smaller than the health rescue services which are established by the regional authorities. They specialize e.g. in the transportation of patients or assist at various cultural and sporting events (paid by the organizer). Usually, one such organization exists in every region although they do not necessarily have an agreement with the regional authority or all health insurance companies.

Being an integral part of the IRS, the flight rescue services must be mentioned as well. Currently, there are 10 stations facilitating air rescue. This represents a very dense network (one of the densest in Europe) covering an overwhelming majority of the territory of the country. The flight rescue services are operated both by private (eight stations) and by state (two stations) bodies. The latter ones are operated by the Police Air Service and by the army. So far, there have been no criticisms on the functioning of the flight rescue services. (Bakken and Rhinard 2013)

According to (Bakken and Rhinard 2013) the role of private (for-profit) bodies in other spheres of civil security is slightly more complicated. During the floods of 2002, for example, there was a large group of relatively well organized citizens who in many cases voluntarily participated at the rescue actions, although they were not explicitly asked to do so. These were some 54,000 workers of private security services. Due to the absence of legal regulation of the activities of private security agencies, the integration of these into the IRS remains problematic. (House of Representatives 2002) It has to be noted, however, that this legislation is currently under preparation by the MoI.

Since 2003 the education on civil security has been again on the primary and secondary schools' curricula.

Recently, the goal of creating a program for education of the population has been set⁶⁶⁵. The main

⁶⁶⁵ http://anvil-project.net/wp-content/uploads/2014/01/Czech-Republic_v1.0.pdf

responsibility rests with the MoI, in collaboration with the Ministry of Education, Ministry of Health and the Ministry of Transportation. Typically, the fire brigades are involved in the education of both public and administration. In 2009, the proposition was made to incorporate the topic of civilian protection into the curricula of pedagogic faculties of universities.

The education of teachers to teach the topic of civil security is also supported by the fire rescue brigades. In this way, 1,666 teachers were trained in 2011 in 126 different courses. In sum, more than 16,200 teachers were trained by the year 2012. (HZS ČR 2012) Also, governmental employees at all levels are trained in special courses on civil security management. In total 8,007 servants were trained in 2011. The participation of the mayors of smaller municipalities, however, is rather low compared to others. This can be explained by the fact that for the mayors – unlike the local government officials – this education is not compulsory.

At the central level, the training is organized by the MoI – GD FRB in cooperation with the ministries of Defense, Health, Finance, Environment, Administration of State Material Reserves, Police Presidium and the Security Policy Department of the MoI. The provision of education in the field of crisis management is obligatory by law. Since this legislation entered into force (in 2001), the training has been organized once in every election period (usually after communal elections). So far, the training for mayors has taken place in 2003, 2007 and 2011. (Svitáková 2011)

In the past, the government did run some educational campaigns, including TV spots. So far, the last TV spots directly related to civil security were aired in 2010. (Initiative for Civilian Protection online) In the years 2009-2010, educational spots were aired with the information on important phone numbers (campaign called “What to do When...”). At the regional level, the public is educated through regional press materials, and local radio and TV stations. For example, the Fire Brigades of the Moravskoslezský Region signed a license agreement with two local cable TVs. Six spots on fire and civil protection were made (The General Directorate of Fire Rescue Service of CR 2014).

The following table provides an overview on operational forces as mentioned above:

Table 27. Overview on operational forces for protection and rescue activities in the Czech Republic

Stakeholder Type	Name	Number of Personnel
Voluntary Organisation	Fire Rescue Service (Employed + Volunteers)	300.000
	Czech Red Cross (Employed + Volunteers)	88,000
Agency/Department	Czech Armed Forces	35,000
	Police	18,000
Private business	Private security workers	54,000
Total		495,000

5.2 Materiel (non-financial) resources

Material resources are provided from the “Integrated Rescue System” composed of the Fire Rescue Service, the Police, the Medical Rescue Service, NGO, the municipal police and others. According to Obrusnik (2005) a special institution (State Material Reserve- AMSA) stores emergency relief items and distributes them during and after disaster accordingly with state, regional and local needs.

The generation of state material reserves is encompassed in emergency contingency plans. The ASMR makes sure that resources are contracted pursuant to the requirements of central government agencies. Furthermore, the ASMR supports their financing, renewal, replacement, lending, release, hiring, sale, storage, keeping and inspection. From the viewpoint of their purpose, the state material reserves divide into material reserve, mobilisation reserve, emergency reserve and humanitarian aid reserve.

The ASMR provides a coordination role in planning and supporting emergency economic measures. As a matter of priority, the ASMR makes use of material resources of private business entities, and, according to requirements by subject-matter Ministries, the ASMR generates and manages material reserves in commodities, whose ordinary production would not cover for increased consumption in state of crisis/emergency (Administration of State Material Reserves- Czech Republic 2009).

Material reserve involves selected primary raw materials, materials, semiproducts and products, designated for supporting national defence capability, for consequence management efforts following emergencies as well as for the protection of vital national economic interests. The material reserve chiefly includes primary mineral inputs for oil, metallurgical, chemical, textile and food industry. A decisive portion of the material reserve comprises an emergency stockpile of oil and selected petroleum products in quantity and structure according to requirements under the Act No.189/1999 Coll., on Emergency Oil Reserve, as amended, which implements in the Czech legal order the European Commission Directive No.1968/414/EHS, amended by EC Directive No.1998/93/ES.

Mobilisation reserve comprises primary raw materials, materials, semiproducts, products, machines and other property designated for ensuring the production of necessary assets for armed forces and armed security services, especially for the state of war or the state of national war threat.

Emergency reserve includes selected primary materials and products, designated principally to ensure critical supplies to sustain the needs of the population and for operations of emergency services and fire rescue service units. The reserve is generated in the case when the necessary materials and products in support of crisis management are not available on national territory in necessary quantity and/or in given timeframe.

Humanitarian aid reserve comprises selected primary materials and products designated for a definite period of time to sustain essential life needs of persons who have suffered a grave material damage in an ongoing emergency. That particularly involves foodstuff for individual consumption, critical sanitary aids and the like. In justified cases, they are transferred to municipal government authorities responsible for their distribution to citizens.⁶⁶⁶

5.3 Training

The Ministry of Interior in order to coordinate the performance of state administration in the frame of crisis management organizes briefings and training sessions and participates in training for acquisition of special professional competence of the crisis management staff. All members of the Fire and Rescue Service of the Czech Republic and members of other fire units are trained to provide

⁶⁶⁶ <http://www.hzscr.cz/hasicien/article/crisis-management-in-the-czech-republic.aspx>

effective help in emergencies. Exercises have been regularly organised and the training follows internal Czech standards for crisis management (Expert Interview 2014).

The planning process starts by preparing the annual training plan (national, regional and local). The preparation of annual and monthly exercise plans follows. Each fire station and each regional Fire and Rescue Brigade have their own exercise plans which are coordinated at national level to ensure that other services (regional Medical Rescue Services, the police, the army, ministries and other bodies of the Integrated Rescue System etc.) are incorporated into these plans.

Exercise facilities include, for instance:

- Any possible parts of real environment
- Any possible real facilities (buildings, factories, collapsed structures, streets, roads, motorways, rivers etc.)
- Local training facilities within regional Fire and Rescue Brigades
- Military training facilities
- Training facilities of other bodies of the Integrated Rescue System.

Guidelines for exercise planning: The guidelines are found in the Directive of the General Director of the Fire and Rescue Service No. 7/2009 on the recommended procedures for preparing and performing exercises. According to the Conception of Civilian Protection (Conception 2013), the authorities are responsible for raising awareness about civil security among the public. The *education on civil security* (called “civil defense” at that time) was completely abandoned in the early 1990s with no substitution, resulting in relatively low knowledge of the population about what to do in the state of crisis.

Since 2004, the country has regularly participated in EU crisis-response exercises. These include EUDREX (October 2004), EUPOLEX (June/July 2005), EURATECH (April 2005), ALBIS (May 2008), EU COMMAND POST (May/June 2010), EU CARPATHEX (September 2011), EU COMMAND POST (November 2012) and TARANIS (June 2013). The range of these exercises varies from floods and earthquakes to chemical, biological, radiological and nuclear threats. (European Civil Protection online) the Czech Republic also takes part in other international exercises, such as the MODEX exercise of civil protection modules organized by the Falck Company in Denmark in January 2013 where the Czech Trauma-team participated. The country participates in the provision of aid under the EU Humanitarian Aid and Civil Protection Directorate General (also known as ECHO). (EDRIS online) The Czech Republic also participates in the EU exchange of experts programme. Under the theme *Improve Crisis Management/ Stronger EU Disaster Response* the country was a lead country in 2012. (FEU 2012), (Bakken and Rhinard 2013).

5.4 Procurement

5.4.1 Procurement regulation

The main tool of the Union Civil Protection Mechanism is the European Emergency Response capability (EERC), which consists of a voluntary collection of in advance prepared Member States response capacities including modules, further response capacities as well as the experts. Joint procurement involves sporadically Slovak Republic, but there is a need for additional legislation. Interoperability is not developed fully (Expert Interview 2014).

Civil protection modules are formed from sources of one or more Member States and they are able to carry out the predefined tasks in the area of response, in accordance with the implemented international instructions. The basic advantage of modules is that they can be deployed at very short notice following a request for assistance through ERCC and can work self-sufficiently and autonomously for a given period of time. At the same time the modules are interoperable with the other ones and are able, if needed, to cooperate with other bodies of the Union or international institutions, in particular with UN. Modules are registered in the CECIS system and closely connected to European response capacities.⁶⁶⁷

Within European Union there are c. 200 modules registered which are split into 17 types (MS Line Publishing House 2014). At present, the Czech Republic makes available through the Mechanism for civil protection EU the following modules (MS Line Publishing House 2014):

- 2x Medium urban search and rescue modules (MUSAR) - a unit for search and rescue operation in cities in medium conditions;
- 1x Heavy urban search and rescue module (HUSAR) - a unit for search and rescue operation in cities in heavy conditions;
- 1x High capacity Pumping Module (HCP) - a unit for the pumping and discharge of large quantities of water;
- 1x Chemical, biological, radiological & nuclear detection & sampling (CBRNET);
- Flood Rescue Boats (FRB) – a unit for flood rescue in boats;
- 1x Advanced medical post (AMP) – a unit with advanced medical post.

Czech Defense Ministry (MOD) procurement is plagued by lack of transparency and remains an arena for shady business deals. Successive governments seem to have viewed MOD contracts as a way to reward themselves and their political supporters with lucrative business deals, cheap asset sales, and kick-backs.⁶⁶⁸ The latest controversial contract for the light-armored vehicles suggests that politicians appear able to manipulate the procurement process by utilizing single source tenders, requiring the use of preferred intermediaries,⁶⁶⁹ and paying higher prices than other countries for similar items. Similarly, the case of the barter/sale through EADS of redundant L-159 aircraft for Casa C-295 transport aircraft seemed to be yet another attempt to circumvent an open, competitive tender.⁶⁷⁰ As in the notorious 2004 Gripen fighter aircraft procurement, the Czech government has shown little political will to investigate possible high-level corruption.⁶⁷¹ The large Pandur contract and the tender for new light armored vehicles were two key tests of the MOD's ability to successfully conduct large procurements.⁶⁷² Czech officials have taken some tentative steps toward cleaning up the procurement system. However, much more transparency is needed within the Czech MOD to prevent politicians and defense officials from manipulating the defense procurement process for personal and political gain.⁶⁷³

⁶⁶⁷ [http://en.msline.cz/index.php?page=cdis-review&cislo=cdis-review-2-2014&clanek=activities-of-fire-rescue-service-of-the-czech-republic-in-nato-and-eu-](http://en.msline.cz/index.php?page=cdis-review&cislo=cdis-review-2-2014&clanek=activities-of-fire-rescue-service-of-the-czech-republic-in-nato-and-eu)

⁶⁶⁸ https://wikileaks.org/plusd/cables/09PRAGUE147_a.html

⁶⁶⁹ <http://www.globalsecurity.org/military/world/europe/cz-procurement.htm>

⁶⁷⁰ <http://www.globalsecurity.org/military/world/europe/cz-budget.htm>

⁶⁷¹ https://wikileaks.org/plusd/cables/09PRAGUE147_a.html

⁶⁷² <http://www.globalsecurity.org/military/world/europe/cz-budget.htm>

⁶⁷³ <http://www.globalsecurity.org/military/world/europe/cz-procurement.htm>

- National legislation on procurement not covered by the EU directives

The award procedures for procurement below EU threshold are foreseen by the directive 2004/18/EC. In addition simplified procedures below the threshold can be used. In the simplified procedure below the threshold, the contracting authority shall invite not less than 5 candidates to submit tenders and to demonstrate the fulfilment of qualifications by means of an invitation in writing. The contracting authority shall make public the written invitation in a suitable manner for the entire duration of the time limit for the submission of tenders. The contracting authority has to use the publication forms laid down by the commission regulation, except for the invitation to the below threshold procedure. The forms have to be published at the national web Public Procurement Information System.

5.4.2 Procurement procedures

The Legislation on public procurement according to the Act on Public Contracts provides several options for the contracting authorities to open up a public procurement using of the following procedures (Global Legal Group 2010):

- open procedure;
- restricted procedure;
- negotiated procedure with publication;
- negotiated procedure without publication;
- competitive dialogue; and
- simplified below-the-threshold procedure.

The acquisition of state material reserves and their using provides the Government of the Czech Republic. The state material reserve involves selected primary raw materials, materials, semi-products and products, designated for supporting national defence capability, for consequence management efforts following emergencies as well as for the protection of vital national economic interests (European Defence Agency 2014).

Fire Rescue Services of the Czech Republic have been strongly involved in the procurement of CM Tools, which is well coordinated (Expert Interview 2014). However, the procurement process in cooperation with non-EU countries is not relevant for the Czech Republic.

- Structures responsible for public procurement at central, local and regional level.
 - Office for protection of competition
 - Ministry for Regional Development: it has been established by the Act No. 2/1969 Coll. On establishing ministries and other central authorities of state administration of the Czech Republic, as amended. It is responsible for governmental proposal of legislation on public procurement and concessions contracts.

Every contraction entity is responsible for its own procurements. If contraction entities associate or group in another way for the purposes of common action aimed at the award of a public contract they are considered as the contraction entity.

The Act on Public contracts enables to conclude a contract with central purchasing body. Central purchasing body can be any Contraction authority which is obliged to award public procurement for other contraction entities by contract. It is not created by any state decision.

5.5 Niche capabilities

In the view of the expert, the Czech Republic benefits especially from the relief goods stockpiles and the close cooperation with military actors (Expert Interview 2014). As it has been found out within the ANVIL country study, the Voluntary Fire Brigades with its 300,000 personnel resources provide a beneficial contribution to the security system in Czech Republic (Bakken and Rhinard 2013). The voluntary organization is participating as an official part at the Internal Rescue System (IRS). Furthermore, Bakken and Rhinard (2013) have indicated, that the provision of assistance of the Czech Republic in several missions abroad have been widely acknowledged.

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

DENMARK

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Linette de Swart and Rachel Beerman)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by AIT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In 2009, Denmark adopted the Emergency Management Act. This act is detailing all aspects of crisis management. The crisis management approach of Denmark assumes the local level to be better placed to tackle local crisis situations than the national level. Private organisations, volunteers and NGO's participate in Danish crisis management. In particular, Falck Redningskorps Ltd⁶⁷⁴, a large private Danish rescue and fire company operates on a contractual basis within many of the Danish municipalities.

Danish Civil Protection League is also supporting, as a non-profit organisation, with 5,000 members. Also the Danish Red Cross acts in crisis situations. But the major national organisation, also international contact point, is the Danish Emergency Management Agency or DEMA⁶⁷⁵. DEMA handles different aspects of the crisis management policy cycle.

DEMA is organised in four core areas, each covering a part of the Danish emergency response from **prevention** (inspection, counselling, supervision and development of national rules and laws preventing fires and explosions, **Emergency planning** (supervision of other governments and private companies on preparedness planning), **Operational** (National Division, International Division, Chemical Division and Nuclear Division and **training** (via the centre for **Education** and **HR Development**)).

The Danish national accounts do not clearly provide an overview on the costs they make to invest in preparedness. Therefore a rough estimation has been made to provide a general idea. The Danish Parliament (Folketing) decides on the **Police** budget. The Parliament sets the Police budget for a 4 year period. In the period 2007-2010 the available annual budget was DDK 7.5 billion (1,008 million euros). The fire services are partially provided by public providers and partially by private operators. The only private operator in Denmark is **Falck**, providing firefighting services for 2/3 of the municipalities in Denmark according to their latest annual report (2013). Besides firefighting services Falck is also responsible for 85% of all ambulance service provided in Denmark. Of the total revenue made in 2013, 46.6% was made in Denmark. The revenue of 2013 amounted to DKK 5.839 million (€ 748 million). DEMA has a staff of 565 employees available divided over 10 different locations (rescue centres and schools). Their annual budget is around DKK 490 million.

The GDP for 2013 was DKK 1,886 billion⁶⁷⁶. The support provided to DEMA is in this case 0.03% of national GDP in 2013. However the costs of DEMA do not cover the entire costs for crisis management as the police forces, the fire brigades as well as the medical assistance play a role in emergency management as well.

⁶⁷⁴ Source: <https://www.falck.com/en/>

⁶⁷⁵ Source: www.brs.dk/eng/

⁶⁷⁶ Source: Statistics Denmark (2015)

Niche capabilities are **Private fire and ambulance services (see above). And the international energy preparedness approach.** A niche preparedness approach of the Nordic countries is found in the energy supply preparedness. The Nordic countries work closely together to create an integrated electricity supply network.

This report gives an overview of the information retrieved from online published resources. As our attempts to contact DEMA and other local experts failed, and many documents with more details were only published in Danish, the current analysis is more high-level than preferred initially.

Table of Contents

DENMARK Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	538
Overview.....	539
Table of Contents	541
List of Figures	543
List of Tables.....	543
List of Abbreviations.....	544
1 Policy	545
1.1 Risk Assessment.....	546
1.1.1 Key risks and former disasters	546
1.1.2 Risk assessment methodology	549
1.2 Policy and Governance	550
1.2.1 Strategy scope and focus.....	550
1.2.2 Monitoring and analytical support to policy making; R&D	551
1.2.3 Policy for Prevention	551
1.2.4 Policy for Preparedness.....	553
1.2.5 Policy for Response	558
1.2.6 Policy for Relief and Recovery	559
1.3 Financing.....	560
1.3.1 Investing in preparedness	560
1.3.2 Investing in consequence management.....	562
1.4 Policy review, Evaluation & Organisational Learning	563
1.4.1 Post-Disaster Assessment.....	563
1.4.2 Departmental Lessons Learned systems	563
1.4.3 Centralised (national) Lessons Learned system	564
1.4.4 International exchange for Lessons Learned.....	564
1.4.5 Regular policy reviews.....	565
1.5 Resilience	565
1.6 Information sharing and data protection	565
2 Legislation	567
2.1 Crisis (emergency, disaster) management concept.....	567

2.2	General crisis (emergency, disaster) management law	568
2.3	Emergency rule	569
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	570
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	571
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	571
2.7	Legal regulations for international engagements of first responders and crisis managers	573
3	Organisation.....	576
3.1	Organisational chart.....	576
3.2	Organisational cooperation	579
4	Procedures	583
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	583
4.2	Operations planning.....	583
4.3	Logistics support in crises	584
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	585
5	Capabilities	586
5.1	Human resources	586
5.2	Materiel (non-financial) resources	587
5.3	Training	590
5.4	Procurement	591
5.4.1	(European) procurement regulations.....	591
5.4.2	Procurement procedures	593
5.4.3	<i>National regulations and procedures</i>	594
5.5	Niche capabilities	595
	Resources	597
	Legislative acts	597
	Other normative acts	598
	Official documents (white papers, strategies, etc.)	598
	Online resources (e.g. websites of key CM organizations)	598
	Publications	598
	Expert interviews	599

List of Figures

<i>Figure 1.1: DEMA's civil preparedness planning process</i>	<i>549</i>
<i>Figure 1.2: Preparedness and crisis management planning</i>	<i>556</i>
<i>Figure 1.3: Cross border energy supply Nordic countries</i>	<i>557</i>
<i>Figure 1.4: Crisis management cordon.....</i>	<i>559</i>
<i>Figure 1.5: Report on the Danish government's planning and coordination of the emergency preparedness for major incidents and disaster</i>	<i>563</i>
<i>Figure 3.1: DEMA's organisation.....</i>	<i>577</i>
<i>Figure 3.2: DEMA's rescue centres and training institutes.....</i>	<i>577</i>
<i>Figure 3.3: DEMA's rescue centres</i>	<i>578</i>
<i>Figure 3.4 Crisis management structure in case of an extraordinary crisis.....</i>	<i>580</i>
<i>Figure 3.5 International crisis management structure.....</i>	<i>581</i>
<i>Figure 5.1: Screenshot logistics capacity per subdivision on DEMA website.....</i>	<i>588</i>
<i>Figure 5.2: Screenshot logistics capacity within subdivision on DEMA website</i>	<i>589</i>
<i>Figure 5.3 Air photograph of the Tinglev training ground.</i>	<i>590</i>

List of Tables

<i>Table 1.1: Position Denmark in the world risk index</i>	<i>546</i>
<i>Table 1.2: Former incidents Denmark between 1951 and 2009.....</i>	<i>547</i>
<i>Table 1.3: Largest natural disasters between 1900-2014, measured in economical impact</i>	<i>548</i>
<i>Table 1.4: Largest natural disasters between 1900-2014, measured in people killed</i>	<i>548</i>
<i>Table 1.5 Largest technological disasters between 1900-2014, measured in number of people killed</i>	<i>548</i>
<i>Table 1.6: Penetration rate and GVA contribution per sector (2011)</i>	<i>562</i>
<i>Table 3.1: Former international engagements.....</i>	<i>582</i>

List of Abbreviations

CESIS	Common Emergency Communication and Information System
DANATO	Danish NATO mission
DEMA	Danish Emergency Management Agency
DKK	Danske Kronor (Danish Crown)
EU	European Union
IHP	(Nordic) International Humanitarian Partnership
IOS	International operational staff
LGDK	Local Government Denmark
MIC	Monitoring and Information Centre
NATO	North Atlantic Treaty Organisation
NOST	National operative staff
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation of Economic Cooperation and Development
RVA	Risk and Vulnerability Assessment
SAR	Search and Rescue
SCEPC	Senior Civil Emergency Planning Committee
SOPs	Standard Operating Procedures
UN	United Nations
UNDAC	United Nations Disaster Assessment and Co-ordination
UNHCR	United Nations High Commissioner for Refugees
UNU	United Nations University
USAR	Urban Search and Rescue

1 Policy

Denmark is situated in Northern Europe, and extends from the Barents Sea and Arctic Ocean on the north to the Baltic Sea on the south and includes Norway and Sweden. Denmark lies south of Norway and to the southwest of Sweden. Denmark's mainland is Jylland (Jutland), a peninsula that shares a short southern border with Germany and otherwise is surrounded by the North Sea, Skagerrak and Kattegat, and Baltic Sea. Jutland accounts for over two-thirds of Denmark's area, the rest of Denmark consists of more than 400 islands. Sjaelland (Zealand), the largest and most densely populated of the islands, is home to the country's capital of Copenhagen. Ferries, bridges, and small planes connect many of the inhabited islands. (Stone Wyman)

Geography and Climate

Denmark is the smallest of the Scandinavian countries in area, at approximately 42,916 square kilometres (Website Denmark, 2014). As the country is an archipelago it gives Denmark a long, irregular coastline of about 7,314 kilometres, characterized by bays and estuaries, sandy beaches with dunes, and some cliffs (Stone Wyman).

As the lowest-lying Scandinavian country, Denmark has the most homogenous terrain, characterized by flat plains, rolling hills, and many lakes, with its highest natural feature topping out at only about 568 feet (173 meters) above sea level. Land cover in Denmark consists of cultivated areas (66%); forests (12%); bogs, meadowland, heath and sand hills, and lakes (10%), with the remainder devoted to built up and traffic areas (CIA World Factbook, 2014 and Stone Wyman).

Denmark's climate is the most temperate of the three Scandinavian countries. Historically, winters are mild and summers cool due to the Gulf Stream and the westerlies. Average temperatures range from a low of about 0.0 °C in January to a high of just over 16°C in August. Within these averages, however, the actual highs and lows fluctuate considerably (Stone Wyman).

Demographics

With 5,627,235 (2014) inhabitants, Denmark is second to Sweden in total population, but the most densely populated of the three Scandinavian countries. The country is highly urbanized, with 85% of its population residing in cities and towns but has a low population density of 130.50 inhabitants per square kilometre (Statistics Denmark 2014).

Economy

The country's economy includes a high-tech agricultural sector as well as prominent companies in several sectors such as pharmaceuticals, renewable energy, and maritime shipping. Although a net exporter of food and energy, Denmark's manufacturing sector relies on imports of raw materials. The Gross domestic product is DKK 466.2 billion (2013) or 253 billion EUR (2013) (DST, 2014; Stone Wyman, 2014).

The next section will detail the risk assessment for Denmark. The risk methodology, former crises and identified risks are discussed.

1.1 Risk Assessment

1.1.1 Key risks and former disasters

In the World Risk Report 2014⁶⁷⁷ Denmark is qualified as a rather safe country compared to other (EU) countries. On the world risk index Denmark is ranked 149th out of 171 countries. Neighbouring countries Norway and Sweden score a bit better. Germany scores a little lower, especially on exposition.

Table 1.1: Position Denmark in the world risk index

Rank	Country	World risk index	Exposition	Vulnerability	Susceptibility	Lack of coping capabilities	Lack of adaptive capacities
147	Germany	3.01%	11.41%	26.37%	15.41%	37.73%	25.97%
149	Denmark	2.93%	10.87%	27.00%	15%08	39.49%	26.42%
158	Norway	2.31%	8.58%	26.86%	14.41%	40.05%	26.13%
162	Sweden	2.19%	7.97%	27.49%	15.39%	40.90%	26.18%

Source: Alliance Developments Work (2014), edited by authors.

The main natural hazard for Denmark is flooding, as the country consists of a long coastline and many islands. Flooding is mainly a seasonal risk and occurs in some parts of the country. Parts mostly at risk are Jutland (Jylland) and along the southern coast of the island Lolland. Besides these two major parts under threat, other parts of the country are at risk for flooding as well, as the country consists of around 400 islands of which 82 are inhabited with Jutland, Zealand (Sjælland) and Funen (Fyn) being the largest ones, both in terms of km² and number of inhabitants. The country as an overall coast line of 7,314 km (IFEH, 2014).

The main threats, in addition to flooding, identified for Denmark are: fires, storms, snow storms, oil spills, man-made and technical disasters⁶⁷⁸. Although the highest risk of the country is flooding, the disasters causing the highest number of casualties and economic damages are storms and transport accidents. The next table provides an overview of the main disasters in Danish history since 1951.

⁶⁷⁷ Source: Alliance Developments Work (2014)

⁶⁷⁸ Source: EC, 2014

Table 1.2: Former incidents Denmark between 1951 and 2009

October 2009: Waste Disposal Fire in Toelt
January 2007: Kyrill storm
March 2006: Bird flu
January 2005: Winter storm Gudrun in Denmark, Sweden & Baltic countries
November 2004: Fireworks accident at N.P. Johnsen's fireworks factory in Kolding, Denmark.
March 2001: Collision of the freight ship <i>Tern</i> and the oil tanker <i>Baltic Carrier</i> east of the Danish island of Falster.
December 1999: Violent hurricane.
1988: Railway accident near Soroe (Zealand); 8 dead, 72 injured.
1985: Oil slick from the Jan of Bremen; 20 km of marsh polluted at the island of Laesoe (in the Kattegat).
1984: Oil slick from the Ibn Rochd; pollution at numerous points on the Jutland and Zealand coasts.
1984: Major storms in Jutland causing extensive damage to buildings.
1976: A 1.4 million acres moorland fire at Aabybro (Northern Jutland). Fire action during one month.
1975: Several big forest fires in Jutland lasting weeks.
1975: Fisher trawler loss in the harbour of Hanstholm (Northern Jutland) during a hurricane; 11 dead.
1973: Hotel fire in Copenhagen; 35 dead.
1972: Tank lorry accident in Simmersted (Southern Jutland). Massive phenol pollution in the water supply system and environmental damage to the streams in the area.
1967: Railway accident at Odense (Funen); 11 dead, 30 injured.
1964: Explosion at a gasworks in Copenhagen; 4 dead, 200 injured and extensive damage.
1964: Explosion at a chemical plant in Roenland (Western Jutland); 3 dead.
1959: Fire and explosion on a tourist boat on a lake near Haderslev (Southern Jutland); 53 dead.
1951: Explosion in a mine depot at Naval Base Copenhagen; 16 dead, approx. 50 injured.

Source: EC, 2014

According to the Brussels based Centre for Research of the Epidemiology of Disasters (CRED), the most costly natural disaster in Denmark is a storm that caused a lot of damage in 1999. In terms of damage cause 7 out of the 8 disasters included, were storms. The eight disasters causing high financial damage was the drought of May 1992. The table below shows the top-8 disasters since 1900, measured in their financial impact⁶⁷⁹.

⁶⁷⁹ Source: <http://emdat.be/>

Table 1.3: Largest natural disasters between 1900-2014, measured in economical impact

Disaster	Date	Damage (000 US\$)
Storm	3/12/1999	2,604,939
Storm	7/01/2005	1,300,000
Drought	may/92	751,700
Storm	24/11/1981	250,000
Storm	25/01/1990	120,000
Storm	17/01/2007	100,000
Storm	25/02/1990	60,000
Storm	28/02/1990	10,000

Source: Emdat, 2014

CRED also reported on the number of people killed. As the following table shows not many Danish citizens died during the eight largest natural disasters, included in the CRED database. All disasters included are storms and the storm created the highest number of casualties was a storm in 1981, which resulted in 9 Danish people killed.

Table 1.4: Largest natural disasters between 1900-2014, measured in people killed

Disaster	Date	No Killed
Storm	24/11/1981	9
Storm	3/12/1999	7
Storm	7/01/2005	4
Storm	18/01/1983	2
Storm	28/02/1990	1
Storm	27/10/2002	1
Storm	27/10/2013	1
Storm	7/12/2013	1

Source: EMDAT, 2014

CRED also collected data on technological disasters. The following table presents the major technological disasters since 1900, measured in the number of people killed. As the table shows only four accidents are included in the CRED database. The largest accident was a transport accident in 1989, in which 55 people lost their lives.

Table 1.5 Largest technological disasters between 1900-2014, measured in number of people killed

Disaster	Date	No Killed
Transport accident	08/09/1989	55
Miscellaneous accident	00/09/1973	35
Transport accident	21/08/1917	18
Industrial accident	04/11/2004	1

Source: EMDAT, 2014

1.1.2 Risk assessment methodology

In order to mitigate the potential impact of the risks described above frequent risk assessments are conducted. Conducting risk assessments was previously mainly done by private companies and local public bodies. Since the Danish National Vulnerability Evaluation (conducted in 2004) also general risk assessments are carried at the central governmental level.

The Danish Emergency Management Agency (DEMA), more specifically its Centre for Resilience and Contingency Planning, developed a methodology to assess the potential risks. The model conducts a risk and vulnerability analysis (RVA model) which forms the basis for all preparedness planning at the central governmental level. As risk and vulnerability planning is rarely required by law, the DEMA model is used on a voluntary basis (DEMA, 2014a).

The RVA model mainly considers potential effects of a crisis on critical functions. These critical functions refer to all activities and services which are indispensable for society. The model assumes a function to be critical if their partial or entire loss will cause grave consequences for life, health, property or the environment. For each of the functions the model assesses what will happen to it in case of simulated large-scale disturbances, accidents or outright catastrophes. The figure below outlines the different model steps. The model itself is not publically available⁶⁸⁰.

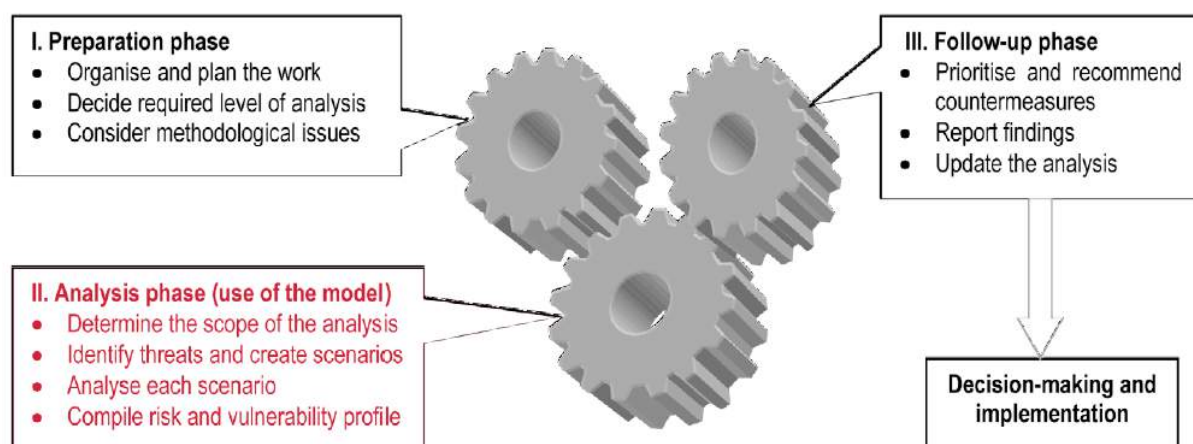


Figure 1.1: DEMA's civil preparedness planning process⁶⁸¹

The results of each model run are included in the National Vulnerability report, which is published yearly. However, no reports could be retrieved (DEMA, 2014a).

⁶⁸⁰ Source: DEMA (c)

⁶⁸¹ Source: DEMA (c)

1.2 Policy and Governance

1.2.1 Strategy scope and focus

Danish crisis management is mainly organised on the local. In case of an emergency the municipal fire and rescue service is the first to respond to the emergency together with the local police and ambulance services. If the emergency is too large for the responders in a single municipality to combat, these services can ask assistance from services in neighbouring municipalities. In a situation in which specialised equipment or skills are required to sufficiently combat the emergency, local authorities can turn to the national level for assistance. This assistance will be provided by DEMA (see below). This division of tasks and responsibilities is laid down in the Emergency Management Act, the main crisis management act in Denmark.

Although the Emergency Management Act is the main crisis management act in Denmark is mainly focuses on fires and related emergencies. In addition to the Emergency Management Act other acts are adopted, which focus on more specific disasters and challenges, e.g. acts on oil spills, harmful substances at sea, energy sector contingency planning and IT and telecommunications preparedness (Stone Wyman).

At the national one overarching crisis management authority has been establish which is oversees the prevention and preparedness policies and if needed can support the municipalities in combatting emergencies. This authority is the Danish Emergency Management Author (DEMA). Before its merger in 1993 DEMA consisted of two separate organisations the State Fire Inspectorate (Statens Brandinspektion) and Civil Defence Agency (Civilforsvarsstyrelsen)⁶⁸².

DEMA is organised in four core areas, each covering a part of the Danish emergency response:

***‘Prevention** includes inspection, counselling, supervision and development of national rules and laws related to the technical and behavioural aspects of preventing fires and explosions.*

***Emergency planning** includes supervision of other government, regional or municipal agencies and private companies on preparedness planning.*

***Operational** response (National Division, International Division, Chemical Division and Nuclear Division). The Chemical Division undertakes the following tasks: Analytical chemical investigations of unknown substances, including chemical warfare agents (CWA) and explosives; examinations of dangerous goods and hazardous materials; information on hazardous substances, including the "Guidebook for Emergency Response to Hazardous Materials Incidents" and "Manual for Response to Hazardous Materials Incidents"; and advisory services, including the Emergency Response Centre.*

*The Centre for **Education** and **HR Development** carries out professional educational consultancy services for colleges, centres and the municipal civil protection preparedness*

⁶⁸² Source: Stone Wyman

system, including training regulations and plans for preparedness staff; training course administration; management and development of both national and internal training courses and exercises; recruitment of staff, staff administration and staff policy; cooperation with national and international universities and civil protection training centres⁶⁸³.

Important feature of the Danish crisis management system is the possibility for municipalities to outsource the fire and rescue services to a privately owned company (article 13 Emergency Management Act). Currently the only private company offering fire and rescue services is Falck Redningskorps Ltd.⁶⁸⁴. According to their annual report 2/3 of all Danish municipalities outsourced the fire and rescue services to them. In addition to providing fire and rescue services Falck also provides around 85% of all the ambulance services in Denmark. This Danish possibility to enter into agreement with a private company to perform basic emergency management functions is rather unique.

1.2.2 Monitoring and analytical support to policy making; R&D

Not many specific examples regarding R&D have been retrieved during this research. Main R&D effort found is the development of the generic risk and vulnerability methodology for civil contingency planning. Based on this methodology a risk and vulnerability model (RVA model) has been development. The development of this tool was partially funded by DEMA. The model serves as the basis for all preparedness planning in Denmark. (RVA is also discussed in section 1.1).

1.2.3 Policy for Prevention

DEMA is responsible for a wide range of tasks relating to prevention, including fire prevention. These include drawing up regulations and directives, providing advice and campaigns directed at the general public, authorities and companies. (Danish emergency management act, 2009)

DEMA works with prevention through rules and regulations in areas such as:

- Rules and regulations concerning fire and explosion hazards in enterprises and storage facilities;
- Operational directives for community centres, hotels, schools, etc.;
- Approval of major stocks of gases and flammable liquids;
- Approval of enterprises covered by the Seveso II Directive due to fire;
- Explosion hazard;
- Regulations for transport of dangerous goods by road and approval of tanks.

(Danish emergency management act, 2009)

⁶⁸³ Source: DEMA, 2014

⁶⁸⁴ Source: <https://www.falck.com/en/>

DEMA also develops educational material and campaigns aimed at changing behaviour and attitude in respect of fire prevention and emergency management. Each year a number of campaigns are implemented. Examples are:

- Fire prevention campaign aimed at primary school children;
- National warning siren campaign along with full-scale testing of national warning sirens.

(DEMA, 2014c; Danish emergency management act, 2009)

The municipal level is often performing the operational tasks of prevention. The municipal council shall for example carry out inspections of fire prevention arrangements of enterprises, listed buildings, buildings in which many persons are gathered, buildings that are inflammable and stores as well as of floating constructions (Art. 36 of part 7 of the Danish emergency management act, discussed in chapter 2). The reports of the prevention analysis are published on the DEMA website (Danish emergency management act, 2009).

Specific prevention for flooding⁶⁸⁵

Spatial planning in Denmark is rather strict. Main reason for such strict regulation is to prevent and minimise the risks of flooding along the coast line. One specific element of Danish spatial planning is the possibility to give unhabituated land back to the sea. This practise ensures that the effects of flooding become less and populated areas are less at risk. If the practise of giving back the land to sea do not suffice it is possible to undertake preventive measures. These measures are taken by the Danish Coastal authority that mainly opts for beach nourishments or other soft defences.

Three acts of the Danish legislation are important to mention when considering coastal adaptation measures:

- Coastal Protection Act: the municipalities have the right to undertake coastal protection projects when necessary, financed with the money from the local landowners gathered through taxes⁶⁸⁶;
- Nature Protection Act: in the first 300 m zone from the coast no new constructions may be build⁶⁸⁷;
- Planning Act: in the first 3 km from the coast new activities is restricted⁶⁸⁸.

Besides these planning restrictions, most discussion on climate change focus on mitigation. An example of this focus is the publication of the Danish government in March 2008 for a general strategy with regard to climate change adaptation. The main purpose of this strategy is to support coordination and informed decisions about autonomous measures. The policy document, however, does not contain any specific analysis or actions yet. It only sets the strategic agenda.

⁶⁸⁵ Source: Policy Research Corporation

⁶⁸⁶ Text (in Danish only) could be found at: http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=114806&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL

⁶⁸⁷ Text (in Danish only) could be found at: <http://faolex.fao.org/docs/pdf/den140206.pdf>

⁶⁸⁸ Text could be found at: <http://naturstyrelsen.dk/media/nst/Attachments/planlovenpengelsk2007.pdf>

Coastal zones are mentioned only briefly in this climate strategy. The strategy says the following:

- Climate adaptation may become a necessity due to sea level rise and more intense storms;
- Enforcement of the protection structures may be needed based on risk-analyses;
- An integrated flood warning system could be useful in the future.

Niche prevention: preparing elderly

A well-functioning scheme in Denmark is that municipalities have a legal obligation to organise home visits to all persons aged 75 or more at least twice a year. In a 1999 evaluation of this practice, 80 percent of the responding municipalities reported that the scheme had helped them reach groups of 'vulnerable' elderly, which they had not formerly known (OECD, 2006).

If this approach resulted in a better preparedness for crisis situations is not retrieved, however this niche approach in preparedness planning is worth mentioning.

1.2.4 Policy for Preparedness

The preparedness planning in Denmark is based on three principles: total defence, sector responsibility and risk assessment.

- The concept of "**total defence**" refers to a collaboration and coordination across Denmark's defence agencies, home guards, police and rescue management units, and all entities engaged in civilian sector readiness (Stone Wyman).
- A fundamental principle of emergency planning in Denmark is the principle of **sector responsibility**. This means that the authorities or institutions, which are in charge of the day-to-day responsibility of a given area, are also responsible for that area in the event of a major accident or disaster. According to the Danish Emergency Management Act, each Minister is responsible for planning within their respective areas of responsibility. Their tasks are to maintain the functions of the Government and public administration, producing necessary legislation and providing guidance to regional and municipal authorities. This principle of sector responsibility is outlined in paragraph 24.1 of the Emergency Management Act, which reads (Emergency Management Act, 2009):
 - The individual ministers shall each within their areas plan the maintenance and continuation of societal functions in the event of accidents and catastrophes, including acts of war, and provide support for the armed forces;
 - The Minister of Defence coordinates the planning regarding the civil sector's emergency management, cf. (1) and provides advice to the authorities. The Minister of Defence shall carry out that part of the planning that does not rest with other authorities;

- At the local level, regional and municipal councils are required to prepare contingency plans for their region designed to maintain critical public sector services during emergencies or restore them as quickly as possible (Stone Wyman).
- Since 2005, **risk** and vulnerability **assessment** has been an organizing principle for setting emergency management priorities. An annual vulnerability assessment report will describe selected emergencies that occurred during the year and discuss specific initiatives (Stone Wyman).

Preparedness planning

The purpose of Danish preparedness planning and crisis management is to prevent that major accidents affect life, welfare and environment. All authorities – municipalities, regions and central authorities – are required to plan for maintaining their most critical functions in event of major accidents and crises.

The Danish authorities are obliged to plan how operation of vital societal functions may be continued or re-established in the event of accidents or disasters. The authorities comprise departments, agencies, state-owned enterprises, regions, municipalities and other public institutions. Also private enterprises should consider preparing a plan for the continued operation of the company in connection with extraordinary events which cannot be handled by means of ordinary resources and procedures. (Emergency Management Act, 2009)

Each Ministry (20 in total) needs to prepare a crisis management plan and develop policies for all areas that do fall under its responsibility. Everything that is not covered by one of the Ministry is covered by the Ministry of Defence. This Ministry formulates all preparedness policies not falling under the scope of one of the other Ministries. The planning efforts are mainly carried out by DEMA on behalf of the Ministry of Defence. DEMA publishes a planning guide, a yearly vulnerability report and holds ongoing information meeting (DEMA, 2009).

Besides the policies developed by the Ministries municipalities are required to develop contingency plans which need to cover all their municipal functions. Most critical point which needs to have a clear policy is the capability of keeping hospitals function during a disaster. Municipalities also need to be prepared to receive and take care for evacuees and other victims of different types of emergencies, e.g. floods, accidents, terrorist act, and other natural and man-made emergencies.

In addition to the policies developed at a national and municipal level DEMA the main crisis management body develops preparedness policies. This organisation does not only coordinate national preparedness, but also provides guidance to the local levels. The work and tasks of DEMA are outlined in the Emergency Management Act: Consolidation Act no. 660 of 10 June 2009. (Emergency Management Act, 2009) The overall mission of DEMA is:

The mission of the national rescue preparedness has been laid down on the basis of the political intentions for the preparedness – that is, the Preparedness Act and the political preparedness agreements concluded at any time. The mission is worded as follows: "The national rescue preparedness is to safeguard the population and society against accidents and disasters in the best possible way. The rescue preparedness authorities shall thus work to minimise the harmful effects of accidents and disasters and increase their preventive efforts in an attempt to avoid the occurrence of accidents and disaster." (DEMA, (a)).

Each policy and planning needs to fulfil seven criteria laid down in the so-called 'Comprehensive Preparedness Planning'⁶⁸⁹:

- 1. Programme management – which should be the central, pivotal point of the planning;**
- 2. Planning assumptions – analyses and ongoing activities that support planning in the remaining areas;**
- 3. Prevention – measures that may prevent incidents or reduce their probability and consequences;**
- 4. Training – for all employees who have a role in the organisation's emergency preparedness;**
- 5. Exercises – which all organisations in the guide's target group should conduct and participate in;**
- 6. Evaluations – in order to utilise the learning potential from incidents and exercises;**
- 7. Crisis management plans – which describe how the organisation has prepared to respond to incidents.**

⁶⁸⁹ Source: DEMA (2009)

DEMA's approach to Preparedness Planning and Crisis Management



Figure 1.2: Preparedness and crisis management planning⁶⁹⁰

Preparedness planning is a continuous process in Denmark. Therefore preparedness plans are regularly updated to ensure that the most pressing risks and threats are always sufficiently addressed. If possible lessons learned and previous experiences are included in these plans as well. In order to ensure that preparedness planning is done in a similar DEMA has developed the Comprehensive preparedness planning guide which can be downloaded at the DEMA website⁶⁹¹.

Nuclear preparedness

DEMA also develops the policy for the nuclear emergency preparedness. This policy includes that Denmark has 24-hours surveillance through a nationwide monitoring system and participates in an international warning network. In case something happens abroad that might affect Denmark the National Police Force will be the main point of contact (DEMA, 2014).

Nordic energy preparedness

A niche preparedness approach of the Nordic countries is found in the energy supply preparedness. The Nordic countries (Iceland, Norway, Sweden, Finland and Denmark) work closely together to create an integrated electricity supply network. When one of the states involved is confronted with a power shortage, other countries can, via cross border connections, supply energy. This limits the chance of severe blackouts in crisis situations (The Nordic Forum, 2005).

⁶⁹⁰ Source: DEMA (b)

⁶⁹¹ brs.dk/eng/Documents/Comprehensive_Preparedness_Planning.pdf. (DEMA, 2009)



Figure 1.3: Cross border energy supply Nordic countries⁶⁹²

However, Denmark in particular has a significant surplus of power generation, and the production is mainly based on fossil fuels with such stocks normally corresponding to at least 3 months' production. Thus the vulnerability due to energy shortage seems to be low in this sense. This makes Denmark less vulnerable to blackouts than the other Nordic countries. (Nordic Energy Regulators, 2006)

In Denmark the relevant legislation with respect to contingency planning and crisis management for the power sector is:

- Article 24 of the Civil Emergency Procedures Act;
- Article 85 b of the Electricity Supply Act;
- Regulation no. 58 of 17 January 2005 governing contingency planning and crisis management for the power sector;
- Regulation no. 917 of 13 November 2002 governing contingency planning regarding fuel storage in the electricity sector.

(Nordic Energy Regulators, 2006)

⁶⁹² Source: Nordic Energy Regulators (2006)

1.2.5 Policy for Response⁶⁹³

Crisis response is mainly organised on a local level as the municipal fire and rescue services are the main actor in emergency management, supplemented with the local police force and medical services. To ensure that emergency response run smoothly the different local parties need to be aware of their tasks and responsibilities as well as each others roles. In the Emergency Management Act the main responsibilities of each actor are laid down and in addition the lines of commands have been described.

If a major accident happens it is possible to establish an Incident Management Team which consists of representatives of the police force, the municipal fire and rescue service and medical services. If needed representatives of other organisations can be included in the team as well.

The overall coordinating responsibility lies with the police force. The police needs to ensure that the area is sufficiently cordoned off, that both the fire brigade and medical service can provide their services undisturbed and that the public does not interfere.

The technical management of the response is conducted by the municipal fire and rescue service. Their leader needs to ensure that the right measures are chosen to sufficiently combat the emergency and minimise the risks as soon as possible. He is also responsible for the general welfare of the deployed units during the entire period of emergency response.

The leader of the medical assistance is primarily responsible for the medical services provided and for the welfare of his personnel. If other organisations need to provide support as well during the emergency response they are also responsible for their own activities. This is in line with the sector responsibility principle, one of the over-arching principles on which the Danish crisis management is based (Please refer to paragraph 2.1).

The division of tasks also has a physical aspect. As the figure below shows the emergency area is divided into several areas. In the centre is the 'scene of accident' – the actual place of the emergency. The scene of accident is surrounded by the inner cordon. Within this cordon is the working area of the municipal fire and rescue services. Between the inner and outer cordon the response area is established. In this area first aid to victims of the emergency is provided. In this area the medical services are active. The outer cordon is guarded by the police. Depending of the involvement of other authorities they will also provided their services ion the response area.

⁶⁹³ Based on: DEMA (2012c)

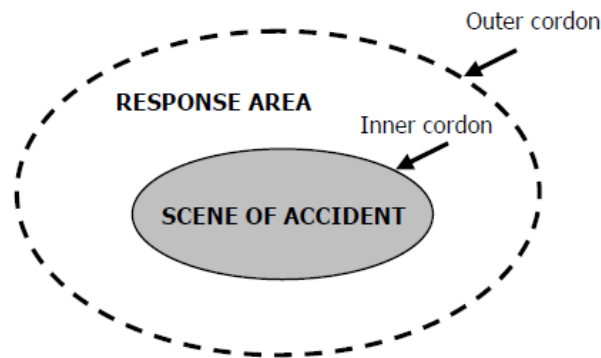


Figure 1.4: Crisis management cordon⁶⁹⁴

DEMA's task

On a national level DEMA issues guidelines for the 'Incident Command System'. The earlier mentioned Incident Command Team forms the core of this system. The guidelines describe the management conditions and co-operation for all types of emergencies covered by the Emergency Management Act. The guidelines provides details on how to act at specific types of emergencies, e.g. chemical accidents etc. The guidelines are available on the website of DEM (only in Danish).

1.2.6 Policy for Relief and Recovery⁶⁹⁵

In case the emergency is larger than the financial capacity of the local government the national government has the possibility to rapidly make additional funds available in order to support the local government in their response and recovery payments.

For flooding some specific policies have been adopted. The national government has adopted a flood insurance scheme which pays compensation in case of coastal flooding. Compensation is paid to landowners, companies or farms that have suffered flood damage due to severe storm events. Since 2000, the fund is covering compensation payments for forest damages as well. In order to be able to pay the compensation money is collected by an annual tax payment charged through all private fire insurance policies. The decision whether or not and to whom compensation will be paid is made by the Danish Storm Council. This council consists of representatives of the Danish ministries, insurance companies and the Local Government Denmark. If needed other parties can become part of the council as well⁶⁹⁶.

⁶⁹⁴ Source: DEMA (2012c)

⁶⁹⁵ Based on: Policy Research Corporation

⁶⁹⁶ Source: Policy Research Corporation

1.3 Financing

1.3.1 Investing in preparedness

The Danish national accounts do not clearly provide an overview on the costs they make to invest in preparedness. Therefore a rough estimation has been made to provide a general idea of the costs of investing in preparedness. It should also be noted that crisis management is often organised locally and the local fire brigades and police forces are the first responders to an incident. DEMA is informed, but only become active once the crisis cannot be handled on a local level any more. Below a rough estimation of the preparedness costs is provided.

The police budget

The Danish Parliament (Folketing) decides on the Police budget. The Parliament sets the Police budget for a 4 year period. In the period 2007-2010 the available annual budget was DDK 7.5 billion (1,008 million euros). In the consecutive period (2011-2014) the budget has increased to DDK 8.5 billion per year, which equals around 1,142 million euros. The budget is divided over the national police and the 12 separate police forces. Each force needs to have its own administrative procedures in place to allocate the budget sufficiently. It should be noted that the budget is not used for crisis management only, as the police force also needs to carry out other tasks, i.e. criminal investigation and safeguarding public order⁶⁹⁷.

The fire brigade budget

The fire services are partially provided by public providers and partially by private operators. A municipality can choose to have its own fire brigade, hire the fire brigade of a neighbouring municipality or can have a contract with a private operator. The only private operator in Denmark is Falck. Currently, Falck provides firefighting services for 2/3 of the municipalities in Denmark according to their latest annual report (2013). Around 65 of the 98 municipalities do have a contract with Falck for firefighting services. The contracts are awarded through public procurement and negotiating. Besides firefighting services Falck is also responsible for 85% of all ambulance service provided in Denmark. Of the total revenue made in 2013, 46.6% was made in Denmark. The revenue of 2013 amounted to DKK 5.839 million (€ 748 million)⁶⁹⁸.

The DEMA budget

DEMA, the national emergency management agency, is the main responsible body for developing policies on prevention, preparedness and response. DEMA has a staff of 565 employees available divided over 10 different locations (7 rescue centres and 3 schools). Their annual budget is around DKK 490 million. This more or less equals € 66 million. This budget needs to cover all the costs made by DEMA, so not only the emergency preparedness and response costs, but also their administrative and personnel costs. The costs are paid by the Ministry of Defence of which DEMA is an agency⁶⁹⁹.

⁶⁹⁷ Source: Politi

⁶⁹⁸ Source: Falck (2014)

⁶⁹⁹ Source: <http://www.fmn.dk/eng/allabout/Pages/Defenceexpenditure.aspx>

The GDP for 2013 was DKK 1,886 billion⁷⁰⁰. The support provided to DEMA is in this case 0.03% of national GDP in 2013. However the costs of DEMA do not cover the entire costs for crisis management as the police forces, the fire brigades as well as the medical assistance play a role in emergency management as well.

Approach to flooding⁷⁰¹

As indicated in paragraph 1.1 floods are a major risk for Denmark. Therefore investment in flood protection is crucial. Main starting point of the flood prevention policy is that the person benefitting from better protection, should also bear the costs. In practise, this means that private landowners and/or municipalities close to potential flood areas should invest in protective measures. Although the private landowners and municipalities are mainly responsible for flood protection, their actions are overseen by the national government, more specifically by the Danish Coastal Authority (DCA). The DCA is part of the Ministry of Transport. The DCA focuses on policy and strategic issues, such as:

- Supervising the compliance to coastal defence laws;
- Providing advice with regard to coastal defence;
- Approving regional and private plans for coastal protection works;
- Monitoring coastline changes;
- Issuing warnings with regard to storm tide.

The third bullet point indicates that the DCA needs to approve coastal protection plans issued by private landowners or municipalities. DCA will grant permission when the following requirements are fulfilled:

- There is concrete evidence that the landowner will be threatened by violence of the sea within the next 20 to 25 years;
- The project does not harm any nearby Nature 2000 sites;
- The project complies with the coastal planning regulations.

As indicated earlier the starting point of Danish flood protection is that the person benefitting from the protection should pay for it. Therefore private landowners need to seek their own way of financing, e.g. through own means or banks loans. Municipalities have to finance projects with local taxes or through public-private partnerships.

In addition, the Danish government introduced in 1998 a longer term program aiming to yearly investing in dyke maintenance and improvement. For the entire duration of the program (1998-2015) the government reserved a budget of approximately € 315 million, which is on average € 18, 5 million a year.

⁷⁰⁰ Source: Statistics Denmark (2015)

⁷⁰¹ Based on Policy research corporation (2014)

1.3.2 Investing in consequence management

Several actors are involved in investing in consequence management. If objects belonging to the public domain have been damaged, e.g. buildings and roads, the 'government' has to pay. If the objects belong to the national government it will be the responsible ministry that needs to pay, if the objects belong to the regional or local government, these governments will bear the costs. If budgets are tight, the national government can provide assistance. Each of the governments have a budget available for un-expected expenses and these budgets can be used to cover the costs to repair, public roads and buildings if needed.

Also most Danish citizens have insurances that cover damages related to property. According to a Lloyd's report the insurance penetration in 2011 was 2.9% (premiums as a % of GDP). In the list of 42 reviewed countries Denmark was ranked 11th. The list is led by The Netherlands (9.5%), followed by New Zealand (5.2%) and South Korea (4.6%). It should be noted that the penetration rate is not related to the relative risks people are likely to face. The report also calculated if a country is over or under insured by calculating the 'benchmark insurance coverage'. Denmark is ranked number 10, with a benchmark of 1.36, indicated that the country is moderately insured. Citizens are better insured than they strictly need to be, however margins are small⁷⁰².

The industry compared to citizens is relatively poorly insured. The Lloyd's report⁷⁰³ calculated the insurance penetration rated per industrial sector compared to the GVA of this particular sector to the national GDP (see table below). Taking all sectors into account the overall insurance penetration for Danish industry is less than 0.2%, and Denmark is ranked 16th amongst 18 reviewed countries. Frontrunner is the US with a penetration rate of almost 1%, followed by Ireland (0.87%) and the UK (0.75%).

Table 1.6: Penetration rate and GVA contribution per sector (2011)

Sector	Insurance penetration	GVA contribution
Transportation and Storage	0.48%	5.70%
Agriculture, forestry and fishing	0.36%	1.18%
Construction	0.29%	5.66%
Wholesale and retail	0.25%	12.84%
Utilities	0.17%	1.93%
Manufacturing	0.14%	14.09%
Accommodation and food service activities	0.14%	1.57%
Professional and administrative services	0.13%	9.03%

⁷⁰² Source: Lloyd's (2012)

⁷⁰³ Source: Lloyd's (2012)

Public administration and defence	0.12%	6.20%
Financial and insurance activities	0.09%	4.36%
Information and communication	0.09%	2.11%
Arts, entertainment and recreation	0.07%	1.78%
Education	0.06%	5.35%
Human health and social work activities	0.05%	10.70%
Mining and Quarrying	0.05%	3.96%
Real estate activities	0.00%	9.96%

Source: Lloyd's (2012)

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

No information retrieved. The recent audit on Danish crisis management (see section 1.4.3) however has critique on the post disaster assessment.

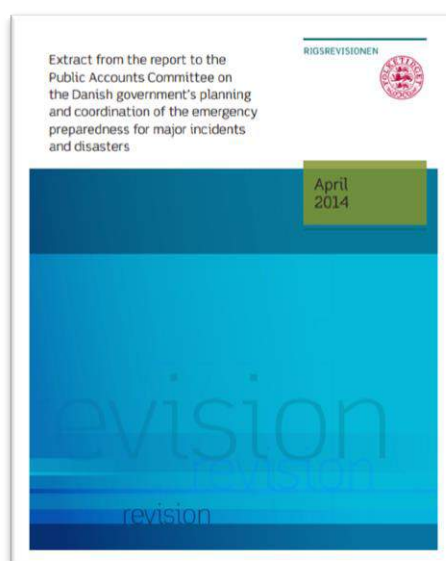


Figure 1.5: Report on the Danish government's planning and coordination of the emergency preparedness for major incidents and disaster

1.4.2 Departmental Lessons Learned systems

No information retrieved. The recent audit on Danish crisis management (see section 1.4.3) however has critique on the post departmental approach and knowledge of emergency planning (Rigsrevisionen, 2014).

1.4.3 Centralised (national) Lessons Learned system

In April 2014, a National Audit Report⁷⁰⁴ on the state's preparedness was published. The Audit Office concludes that the key ministries and agencies in preparedness have prepared themselves to deal with major accidents and disasters. The National Audit Office concludes in addition, the Emergency Management Agency has not solved all tasks concerning the coordination of emergency planning satisfying as the Board does not have a comprehensive overall view of contingency planning in Ministries. Finally, the National Audit Office stated that the authorities' efforts in evaluating major accidents and disasters can be improved and that all authorities prospectively writing should evaluate their crisis management at major events and exercises to ensure that the experience is retained and used to improve preparedness.

Some highlights:

- "The Emergency Management Agency has solved the task of supporting ministries contingency planning by establishing a common guide to good contingency planning and providing advice to ministries but has not solved the problem of assessing the consistency of contingency planning satisfactory since it lacks a comprehensive overall view of contingency planning in the ministries and thus not a sufficient basis for assessing the relationship."
- "The authorities' efforts in evaluating major accidents and disasters and exercises can be improved."
- "The authorities have [...] followed up on the learning points from the terrorist attacks in Norway in 2011 with a view to improving the Danish preparedness. The Audit office agrees. "
- "The National Audit Office finds that all authorities prospectively writing should evaluate their crisis management at major events and exercises to ensure that the experience is retained and used to improve preparedness."

1.4.4 International exchange for Lessons Learned

Danish crisis management organisations participate in international preparedness and crisis management training. A recent example is the SKAG EX11 exercise. In this exercise crisis management organisation from Norway, Sweden, Finland and Denmark were involved. Around 3,000 people from approximately 55 organisations participated. The exercise was centred around a fire on the passenger ferry MS Bohus. This ferry operates on the route between Strömstad and Sandefjord. As a result of the fire the vessel collided with a smaller bunkering vessel, the Oslo Tank. The involved organisations all had to practise their specific roles. Once the exercise was finished lessons learned were shared and presented to the national crisis management authorities via the 'SKAG EX11 way forward report'. This report provides details on the exercise as well as the strengths and weaknesses which became apparent during the exercise (DSB, 2012).

⁷⁰⁴ Source: (Rigsrevisionen, 2014)

1.4.5 Regular policy reviews

No confirmed information was retrieved. Based on the information collected for Paragraph 1.1.1 it seems that a Danish National Vulnerability Evaluation exists. However, it seems no recent report has been published since 2005. Moreover, recently an audit was performed on the organisation of Danish crisis management. Based on this evaluation it might be expected that the current policies were reviewed.

1.5 Resilience⁷⁰⁵

The concept of resilience in civil protection, in terms of country's capacity to withstand shocks due to natural and other disasters, to rebuild itself with efficiency, and to improve on the pre-existing state wherever, has not been explicitly established by law or another normative act. However several public education campaigns have been organised in which the public has been informed on what to do in case of a crisis situation. Special attention in these campaigns was paid to flooding. Aim was to improve homeowner's resilience towards storms, storm surges, torrential rain, groundwater flooding etc.

Also several applications for mobile devices have been developed to enable Danish people to be better prepared in case of a crisis. The first application is developed by the Danish Insurance association and gives homeowners instructions on how to better prepare themselves and their homes for extreme weather conditions. The second one is developed by the association of Danish regions. This application provides a quick overview of relevant emergency contacts. In addition the user can quickly retrieve health data, geodata and general advice.

1.6 Information sharing and data protection

Crisis communication

Part 6 of the Emergency management act (detailed in chapter 2) deals with radio communication (Emergency management act, 2009).

According to article 29.1, the municipal council and the regional council shall ensure that the national radio communication network is used for the carrying out of own and joint emergency management tasks. The Minister of Defence, after his negotiations with Minister concerned, may lay down rules stating that parties, including individuals, other than the municipal councils and the regional councils shall use the radio communication network (article 29.2). For example in case of a pandemic, the Minister of Health will negotiate with the Minister of Defence on the message to be provided. After this consultation the Minister of Defence will ensure that the message will be communicated. .

⁷⁰⁵ Based on Preventionweb (2015)

Moreover, the Minister of Defence may lay down rules on the use of the national radio communication network, including connection and utilisation. Subsequent to negotiations with the Minister of Finance, the Minister of Defence may furthermore lay down rules on the payment for connection to and use of the network (article 29.3)..

Data protection

Data protection is not mentioned in the Emergency management act. Based on EU data protection law the public authority is, in principal, required to obtain explicit and unambiguous permission to use personal data. Only exemption is the situation in which the public authority needs the personal data in order to fulfil its public duty in a good and sufficient manner, but no time is available to obtain the consent of the public. An example could be providing instant medical assistance to an unconscious person.

Registration of volunteers

Several crisis management related organisations do use volunteers. However, these volunteers are not registered in one national database. Each organisation involving volunteers has its own database with details on the available volunteers. Therefore, databases on volunteers will be available at DEMA, the Red Cross and the Danish Civil Protection League, the three most important organisations involving volunteers in crisis management situations.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

Danish crisis management is based on five over-arching principles. These principles apply to all phases of crisis management, ranging from prevention and preparedness to response and recovery. Some of the principles are laid down in legislation, e.g. in the Emergency Management Act (refer to following paragraph), while others are not. The principles are⁷⁰⁶:

- *Sector responsibility*: this principle indicates that each department/agency which has a responsibility for a specific sector also remain responsible during a crisis. For example, because the Ministry of Health is responsible for public health in general, the Ministry will also be responsible in case of a pandemic outbreak.
- *Similarity*: according to this principle the crisis management setup should resemble the daily setup as much as possible in order to minimise the changes needed in case the crisis management system is activated.
- *Subsidiarity*: refers to a situation where crisis management activities are conducted on the lowest organisational level possible. This principle refers to the decentralised crisis management approach used in Denmark.
- *Cooperation*: organisations involved in crisis management should cooperate with other relevant organisation when they are planning their crisis management activities. This principle is especially important for maintaining critical infrastructure.
- *Precaution*: relates to the establishment of a crisis management organisation that may respond in case of an emergency. The organisation needs to be established before something actually happens.

Main act in the field of crisis management is the Emergency Management Act which was adopted in 2009. This act lays down the division between municipal firefighting and rescue services, and national firefighting and rescue services. It also outlines the responsibilities of DEMA and provides, in article 1, the overall task of fire and rescue services. This overall task is the following:

‘The task of the fire and rescue services is to prevent, limit and redress personal injury and damage to property and the environment arising from accidents and disasters, including acts of war, or imminent danger as such’⁷⁰⁷

⁷⁰⁶ Source: DEMA (b)

⁷⁰⁷ Article 1 Emergency Management Act

2.2 General crisis (emergency, disaster) management law

As indicated in the previous paragraph the Emergency Management Act⁷⁰⁸ was adopted recently (in 2009). As far as the researcher could establish the act is not under review.

The act is divided in 13 different parts, each covering its own aspects of Emergency management. The following parts have been included:

Outline (Table of contents):

- Part 1 Preliminary provisions;
- Part 2 The national fire and rescue service;
- Part 3 The municipal fire and rescue service;
- Part 4 Deployment of the fire and rescue services;
- Part 5 Emergency management planning etc. within the civil sector;
- Part 6 Radio communication;
- Part 7 Preventative measures etc.;
- Part 8 Expropriation;
- Part 9 Injunctions, orders etc.;
- Part 10 Personnel provisions;
- Part 11 Penalties and disciplinary provisions;
- Part 12 Amendments to other legislation;
- Part 13 Commencement and temporary provisions.

The Emergency Management Act is strongly focused on fire and rescue services, which form the backbone of Danish crisis management. Fire and rescue services comprise two levels; the national level (under direct authority of the Minister of Defence) and the municipal level (under direct authority of the municipal council). Although the municipal fire and rescue services fall under the authority of the municipal council, the Minister of Defence is entitled to supervise these services. The Minister of Defence also has the opportunity to authorise DEMA to take over the supervisory of the Ministry of Defence (Article 4.2). In practise, DEMA has taken over the task of the Ministry of Defence and therefore is responsible for the day-to-day supervision of the local fire and rescue services.

In this two-level system the municipal fire and rescue services form the backbone of the Danish crisis management system as they are the first service to be warned in case of an emergency. If needed the crisis response can be scaled up and the coordination will shift from a local level to the national level. At this point DEMA becomes involved and will share its response capacity.

In principle, each Danish municipality could have its own public fire and rescue services. However, article 13 of the Emergency management act offers the opportunity for municipalities to either share the obligation with other municipalities or enter into a contract with private-owned companies

⁷⁰⁸ The Act can be consulted online via:

http://brs.dk/eng/legislation/act/Pages/the_emergency_management_act.aspx

offering fire and rescue services. Many municipalities have opted for this last option and signed an agreement with Falck, a private company offering fire and ambulance services. The Emergency Management Act also offers the possibility to conclude an agreement with DEMA, in which it is agreed that some of the municipal fire and rescue services will be taken over by the national fire and rescue services.

The main task description of the municipal fire and rescue service is laid down in article 12 which says *'that the municipal fire and rescue service shall be able to provide a justifiable response to prevent personal injuries, damage to property and the environment arising out of accidents and catastrophes, including acts of war. The fire and rescue services shall moreover be able to receive, accommodate and cater for evacuees and other distressed persons.'*

In close connection article 17 of the Emergency Management Act states that the overall crisis response falls under the responsibility of the police commissioner. This commissioner is also responsible for sounding the alerts or warnings, cordoning off, evacuation and other necessary measures (article 17.2). The action needed to combat the fire or the emergency at hand remain with the officer from the fire and rescue service.

The Act also provides the fire and rescue services with the possibility to demand any kind of privately-owned tools and equipment and means of transport if needed. Also the accompanying crew needs to be made available if desired (article 20.1). The individual that provides the goods is entitled to compensation from the municipality for deprivation of material and for any damage to it (article 20.2).

2.3 Emergency rule

The Danish legal system does not provide 'discretionary powers' which means that in case of an emergency or disaster the authorities do not obtain different responsibilities and powers. During each crisis the authorities must follow the regular principles and procedures as much as possible. This is based on the principle of similarity (one of the five principles playing an important role in Danish crisis management) meaning that the actions undertaken by and the responsibilities of authorities should resemble their normal actions and responsibilities as much as possible under the more extreme circumstances⁷⁰⁹.

⁷⁰⁹ Source: DEMA (b)

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Each Ministry is obliged to draw up an emergency plan that indicates what will happen and which procedures have to be followed in case a disaster in its area of expertise occurs (article 24.1 Emergency Management Act). For example, the Ministry of Transport has a legal obligation to draft an emergency plan indicating what will happen when flooding occurs. In addition to indicate the procedures to be followed, the responsible Minister has to ensure that functions normally carried out in society can be continued as well.

In Article 24.2 the Emergency Management Act lays down that the Ministerial plans need to be revised if recent developments make such changes necessary. Irrespective any developments requesting for a revision of the plan, the Ministry is obliged to review its plan(s) at least every four years. Once the plans have been drafted or revised they need to be sent to DEMA⁷¹⁰, so that DEMA can incorporate the relevant parts in its own emergency response plans.

As already indicated several times, the main focus of Danish disaster response lies at municipal level. To ensure that local response is in line with the emergency response plans drafted at ministerial level, each Ministry has the obligation to draft guidelines, within their own area, on how to incorporate departmental approaches in the regional/municipal emergency plans (article 27 Emergency Management Act). The regions/municipalities have the obligation to follow these guidelines.

Article 28.1 gives the respective Minister the opportunity to involve public authorities as well as public and private enterprises and institution to contribute to the planning or execution of task falling in the area of emergency management. This means that the Minister can opt for state-of-the-art knowledge and skills. However the Minister needs to negotiate with the enterprises and institutions regarding the scope and possible compensation from state (article 28.3).

In addition The Minister has the possibility to require special measures from public and private enterprises and institutions as long as it concerns goods, services, means of production etc. which fall within their normal operations (article 28.2). Also in this situation the Minister has to negotiate about the scope and possible compensation (article 28.3).

⁷¹⁰ Article 24.3 Emergency Management Act

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Regional/municipal emergency plans

Similar to the ministerial plans each region or municipality has the obligation to prepare a regional/municipal emergency plan. This plan has to be adopted by the municipal council (article 25.1 Emergency Management Act) or the regional council (article 25.2). As indicated in the previous paragraph the plans need to incorporate aspects from the relevant Ministerial emergency plans. Each region/municipality needs assess which aspects it needs to include as not all Ministerial plans will be relevant.

Also the regional/municipal plans need to be revised when certain development makes the revision necessary. Irrespective of such a development, the emergency plan needs to be revised once during each regional and municipal electoral period (Article 25.3). Elections are held at least every four years⁷¹¹, so on average also the regional/municipal plans are reviewed once every four years.

Similar to the Ministerial plans also the plans of the regions and the municipalities need to be sent to DEMA, so that DEMA is able to incorporate the necessary information (article 25.4).

Fire prevention

The Emergency Management Act, in article 36.1, lays down the strict obligation for municipalities to *'carry out inspections of fire prevention arrangements of enterprises, listed buildings, buildings in which many persons are gathered, buildings that are inflammable and stores as well as floating constructions.'* How such inspections need to be carried is harmonized between municipalities as the Ministry of Defence issues detailed rules on how to conduct such inspections and how to remedy and/or punish for any deficiencies detected (article 36.2). Fire inspections can be carried out any moment in time and no court order is needed to access the premises (article 36.3).

Article 36a provides the Minister of Defence with the possibility to lay down rules relating to the publication of the results and sanctions based on the fire prevention inspections of the individual municipalities. Such a publication include the names of inspected natural and legal entities (so all inspections conducted) as well as the names of natural and legal entities who received injunctions or orders, or are subject to sanctions.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Private sector

⁷¹¹ Source: <http://elections.sim.dk/local-elections.aspx>

As indicated in paragraph 2.2 the Emergency Management Act provides municipalities with the opportunity to enter into an agreement with privately-owned organisations that assists them in carrying out of tasks within the municipal fire and rescue services (article 13). Best known example of a private company hired to provide fire and rescue services is Falck⁷¹².

Volunteers

The Emergency Management Act only regulates the involvement of ‘non-registered’ volunteers. According to article 40 any individual that is present at an emergency side can upon request of the fire and rescue services take part in fire-fighting and rescue operations. These people are not called-up to help out; they are just present at the scene. Often these people will not be trained, unless they have taken courses themselves, e.g. first aid training. Each individual that took part in the fire-fighting has a right of compensation for substantiated loss of earnings. The municipality has to compensate this loss of earnings.

In addition to the ‘non-registered volunteers’ a group of registered volunteers exists. The volunteers are all member of the Danish Civil Protection League which is a non-profit organisation with 5,000 members⁷¹³. On the website of the Danish Civil Protection League Danish citizens can apply to become a volunteer. Based on their experience, possibilities and the need of the League they will be assigned a dedicated role. With the League many different types of roles can be fulfilled, e.g. becoming part of the voluntary fire brigade or work with search dogs. The volunteers of the League predominantly work in local rescue teams. Although they mainly operate on the local level, if needed the teams can also be involved in national preparedness planning. In addition, the League aims to increase the knowledge of preparedness and prevention among the population and through the education of the population to increase their level of self-preservation and robustness (EC, 2014).

NGOs

The most important NGO involved in Danish crisis management is the Danish Red Cross⁷¹⁴. The Danish Red Cross provides aid both in Denmark and abroad. In Denmark the Red Cross is mainly involved in establishing and managing refugee centres. In case of an emergency they can provide medical assistance at the incident location by sending a Quick Response Medical Assistance Team, support the municipal government to provide shelter and relief for the evacuated population and to support the municipal government in registering and tracing missing persons. In addition the Red Cross provides services to supply bandages, mattresses, blankets and so on. Abroad the Danish Red Cross is often operating in areas of conflict or areas affect by disease or large disasters.

The researchers were not able to establish whether or not the involvement of the Danish Red Cross in crisis management is regulated by law, as no information in English was available.

⁷¹² Source: <https://www.falck.com/en/>

⁷¹³ Source: <http://beredskab.dk/bliv-frivillig/opgaver-som-frivillig/#.Vm7A4P5iUk>

⁷¹⁴ Source: <https://www.rodekors.dk/>

2.7 Legal regulations for international engagements of first responders and crisis managers

Denmark is active in the field of international humanitarian aid. If an emergency happens somewhere in the world nations can turn to DEMA for help. DEMA will assess the international request and if Denmark is able to provide help, DEMA will ensure that response capacity becomes available rapidly. Denmark is able to call up a fully equipped operational taskforce for specific disaster within 12 hours. Specific areas of expertise include earthquake disasters, floods, forest fires, refugee crises, etc. The planning of international operations is supported by the formation of a service package concept (flexible manned equipment modules) that can be applied in connection with disaster response and response to complex emergencies (DEMA, 2014).

The European Union

Denmark, as member of the EU, has implemented the EU regulation with respect to crisis management. The Council Decisions do apply in Denmark. These Council Decisions regulate some aspects of cross border assistance and they focus on the procedural side of assistance indicated how requests should be filled, when countries need to respond and how the teams provided are coordinated. The following decisions and treaties have been implemented:

- Council Decision of 8 November 2007 establishing a Community Civil Protection Mechanism;
- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations.

The Council Decision 2007/779/EC/Euratom of 8 November 2007 was issued to set up an effective cooperation mechanism to coordinate rapid exchange of information and arrange assistance through an European network of civil protection resources. The Community Civil Protection Mechanism is based on establishing amongst others: an inventory of possible assistance and intervention teams at an EU level, a common training programme, a Monitoring and Information Centre (MIC) that forwards requests for assistance by affected Member States to a network of national contact points, a Common Emergency Communication and Information System (CECIS) and the provisions for facilitating the sharing of information on the resources available within the network.

The Council Decision 2008/617/JHA of 23 June 2008 aims to set a framework for the cooperation between Member States' special intervention units in crisis situations. The Decision establishes the general rules and conditions for the provision of assistance by special intervention units to any requesting Member State. According to the provisions of this Decision, the units from countries that provide assistance take up an assisting role and act only within the limits and powers as defined by their own national law. To ensure that experience, expertise and information on managing crisis situations are exchanged joint trainings and exercises between Member States are promoted and may be funded from Community financial programmes.

The United Nations

Denmark is also Member to the United Nations. In the area of civil protection and humanitarian aid, Denmark is involved in the UN Office for the Co-ordination of Humanitarian Affairs, OCHA. In case of a large international disaster requiring specific support Denmark can provide specialised help. During the direct aftermath of a crisis Denmark can send either a, UNDAC or USAR team (Please refer to paragraph 3.2). Besides direct relief operations Denmark is also involved in longer term humanitarian aid. In order to provide this aid sufficient Denmark, together with Sweden, Finland, Norway and the UK is party to the International Humanitarian Partnership (IHP). This partnership lays the foundation for mutual support of equipment models of equipment modules for the purpose of offering manned support and operational packages to the United Nations, including, among others, OCHA and UNHCR (UN High Commissioner for Refugees). In addition this cooperation also includes joint exercises and trainings.

International agreements

Denmark has concluded a series of bilateral and multilateral agreements on early notification of nuclear accidents, the exchange of information relating to nuclear facilities and agreements on mutual disaster aid, etc.⁷¹⁵.

In addition Denmark has concluded bilateral agreements with other Nordic states. These agreements contain obligations regarding early notification of abnormal events or detection of abnormal levels of radiation and exchange of information. Besides these bilateral agreements the Nordic states have ratified the IAEA Early Notification Convention. As Denmark, Finland and Sweden are EU Member States, they have the obligation to implement arrangements regarding crisis management communication. These arrangements regulate crisis communication between the different EU Member States as well as communication between EU and non-EU Member States that have joined the communication system.

Furthermore Denmark is part to several agreements that define different obligations for communication and co-operation. These agreements have been written down in The Nordic Manual (2006, updated in 2008⁷¹⁶). The following countries have agreed to share information in order to improve nuclear safety:

- •Denmark: Danish Emergency Management Agency (DEMA)
- •National Institute of Radiation Hygiene (SIS)
- •Finland: Radiation and Nuclear Safety Authority (STUK)
- •Iceland: Icelandic Radiation Protection Institute (GR)
- •Norway: Norwegian Radiation Protection Authority (NRPA)
- •Sweden: Swedish Radiation Safety Authority (SSM)

⁷¹⁵ E.g.. Agreement between the Government of the People's Polish Republic and the Government of the Kingdom of Denmark on Exchange of Information and Cooperation in Nuclear Safety and Protection Against Radiation. Done at Warsaw on 22 December 1987.

⁷¹⁶ E.g. Memorandum of Understanding (The Nordic manual, 2006) on cooperation regarding exchange of information and assistance between Nordic authorities in nuclear or radiological incidents and emergencies. (retrieved via: https://www.stralsakerhetsmyndigheten.se/Global/IRRS/Modules%20summery/Mod%202%20Global%20safet y%20regime_FINAL.pdf)

3 Organisation

3.1 Organisational chart⁷¹⁷

The Danish crisis and emergency management system is decentralised and day-to-day crisis response is organised on a local level, i.e. municipal level. This means that local fire brigades, police and ambulance services are the first to respond in case of an emergency and the mayor of the city is responsible for all actions taken. The municipal level does not have the obligation to consult the national level (the second layer of Danish crisis management) first before starting response operations. In case of larger or more long-term crisis, which are transcend local capabilities, the national level can get involved.

At the municipal level the main first responder to an emergency are the fire brigade services. In Denmark each municipality has the option to have its own (public) fire brigade or to opt for hiring a private company (mostly Falck) or use a voluntary fire brigade. Irrespective the solution chosen the fire brigade needs to be able to leave the fire station within 5 minutes after the alarm. On the emergency site the fire and rescue services are coordinated by the so-called 'on site commander' often a firefighter. The overall, wider, response is coordinated by the police.

If the magnitude of the crisis is so large that the local fire brigade is no longer able to sufficiently deal with the crisis on its own, they can ask the support of one of DEMA rescue centres. If DEMA gets involved in crisis management, the coordination is scaled up from local to national level.

DEMA as national crisis organisation

An important organisation for Danish crisis management at national level is DEMA. As described before in case of larger crises DEMA can provide support to municipal response services in case these services can no longer deal with the crisis themselves or special equipment/ additional manpower is needed. In addition to providing response capacity DEMA is also involved in crisis prevention and preparedness. As explained in chapter 1 DEMA is responsible to carry out the yearly vulnerability assessment and needs to implement the policies of the Ministry of Defence.

To support municipalities in crisis response DEMA has six rescue centres from which they can provide additional operative support to municipalities. These centres have staff available 24/7 and the staff should be able to leave within five minutes after a request for assistance comes in.

DEMA also has three trainings centres where emergency personnel can be trained. The graph below shows the internal structure of DEMA.

⁷¹⁷ This section is based on: DEMA (b)

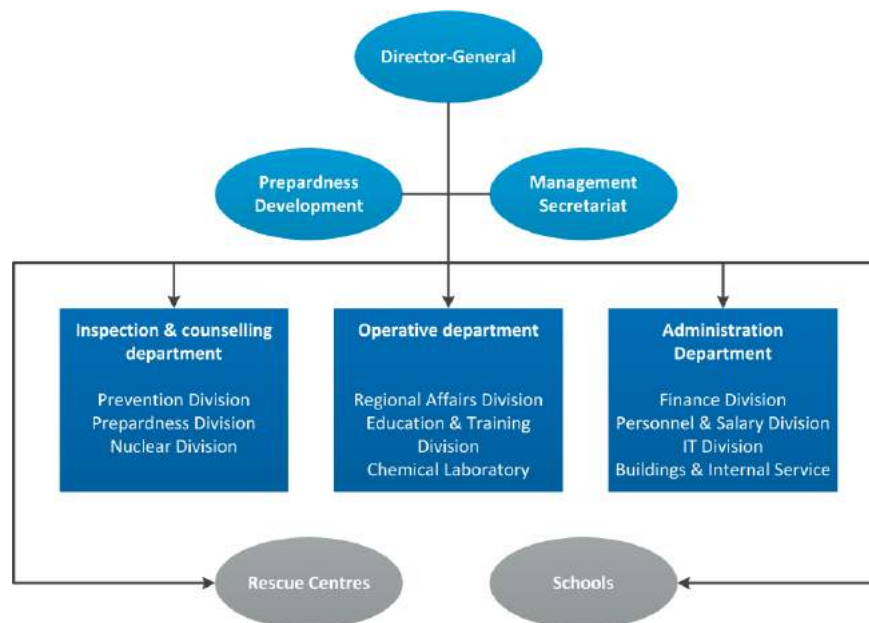


Figure 3.1: DEMA's organisation⁷¹⁸

The rescue centres of DEMA are spread over the main islands and are named Nordjylland, Midtjylland, Sudjullayd, Sjælland, Hedehusenen and Bornholm. The locations are chosen in order to ensure that every part of the country can be reached within 2 hours from one of the centres. The training locations are more clustered, located on Tinglev, Snekersten and Birkerød. Following figure shows the locations of the DEMA rescue and training centres (DEMA, 2014).



Figure 3.2: DEMA's rescue centres and training institutes⁷¹⁹

DEMA in the national structure of government

⁷¹⁸ Source: DEMA, 2014, edited by authors

⁷¹⁹ Source: brs.dk, edited by authors

Before 2004, DEMA was part of the Ministry of Health. As the Ministry of Defence is responsible for coordinating the government's wide civil preparedness planning, implement the taken measures and address all areas not covered by the other Ministries, DEMA became part of the Ministry of Defence in 2004. Within the Ministry of Defence the Office of Emergency Management is responsible for (i) setting the direction of preparedness policy; (ii) negotiating and implementing of political agreements related to crisis management; (iii) leading international cooperation efforts on emergency preparedness; (iv) overseeing both DEMA and the Home Guard and (v) setting the performance requirements for both of them. DEMA is responsible for the day-to-day national coordination of the emergency management and therefore the mission of DEMA is *'to cushion the effects of accidents and disasters on society and to prevent harm to people, property and the environment'*. DEMA has the full responsibility and authority for coordinating the entire spectrum of emergency management, from planning/preparedness to response and recovery. In addition to its overall mission of coordinating crisis management on a national level, DEMA is responsible for operating the rescue centres and training institutes. The figure below presents the embedding of DEMA within the Ministry of Defence.

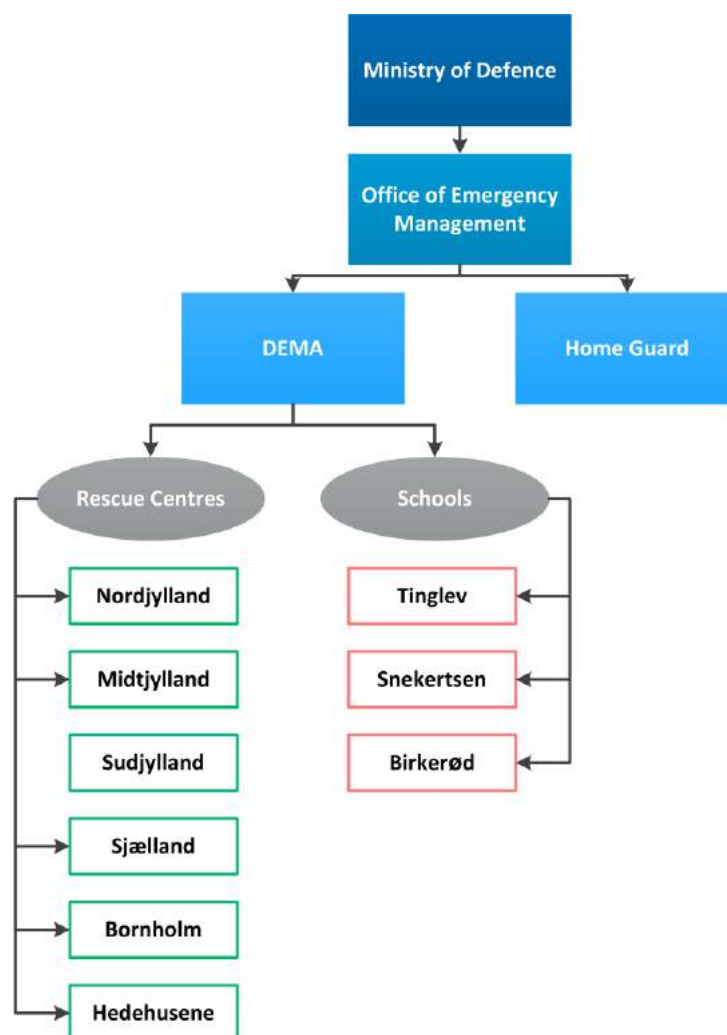


Figure 3.3: DEMA's rescue centres⁷²⁰

⁷²⁰ Source: DEMA, 2014, edited by authors

3.2 Organisational cooperation

Organisational cooperation in national crisis situations

The structure shown above presents the general crisis management system at the national level. This system, for example, applies to larger fires that involve more than one municipality or large scale pollution at sea. As a general starting point the local level, i.e. the municipalities, needs to start their response procedures and their police force, fire brigade and medical assistance will be first on the scene. In case the emergency is larger than they can solely manage the local level can ask for assistance of the DEMA rescue centres (DEMA, (b)).

However it might happen that a crisis is more extraordinary (e.g. pandemic or large floods) and to adequately respond to the crisis special skills and decisions are required. In such a situation the special crisis management system, the so-called Danish National Emergency Management Organization, will be activated. At the governmental three committees/groups will become operative. These three groups make the necessary decisions on different levels:

- **The Government Security Committee:** this is a high level committee consisting of the Danish Prime Minister (chairman of the committee), the Minister of Economic Affairs and Business, the Minister of Foreign Affairs, the Minister of Defence and the Minister of Justice. If needed this group can be expanded by other ministers.
- **The Senior Official's Security Committee:** this committee consists of the highest civil servants, i.e. the permanent secretaries, of the above mentioned Ministries. In addition the Head of the Defence Intelligence Service as well as the Head of Security Intelligence Service are member of this committee. If necessary other permanent secretaries or officials may be included. The Committee's chairman is the Permanent Secretary of the Prime Minister's Department service.
- **The Crisis Management Group:** contains representatives of the departmental and undersecretary level of the Ministries mentioned above. Also representatives of the Ministries of Foreign Affairs, Ministry of Health, the Defence Command Denmark, the National Danish Police and DEMA are presented. The group is chaired by representatives of the Prime Minister's Department.
(DEMA, (b))

Between the three committees/groups a clear hierarchy exists; the government security committee is the highest decision making body, while the other two prepare the decisions taken by the government security meeting and collect the necessary information to do so. The decisions taken are executed by one of the two operational staffs available at national level. In case of a national crisis (only affecting Denmark) the decision will be executed by the National Operational Staff (NOST) and in case of an international crisis affecting Danish people abroad this will be done by the International Operational Staff (IOS). DEMA supports both the NOST and IOS if needed. The graph below presents this structure schematically.

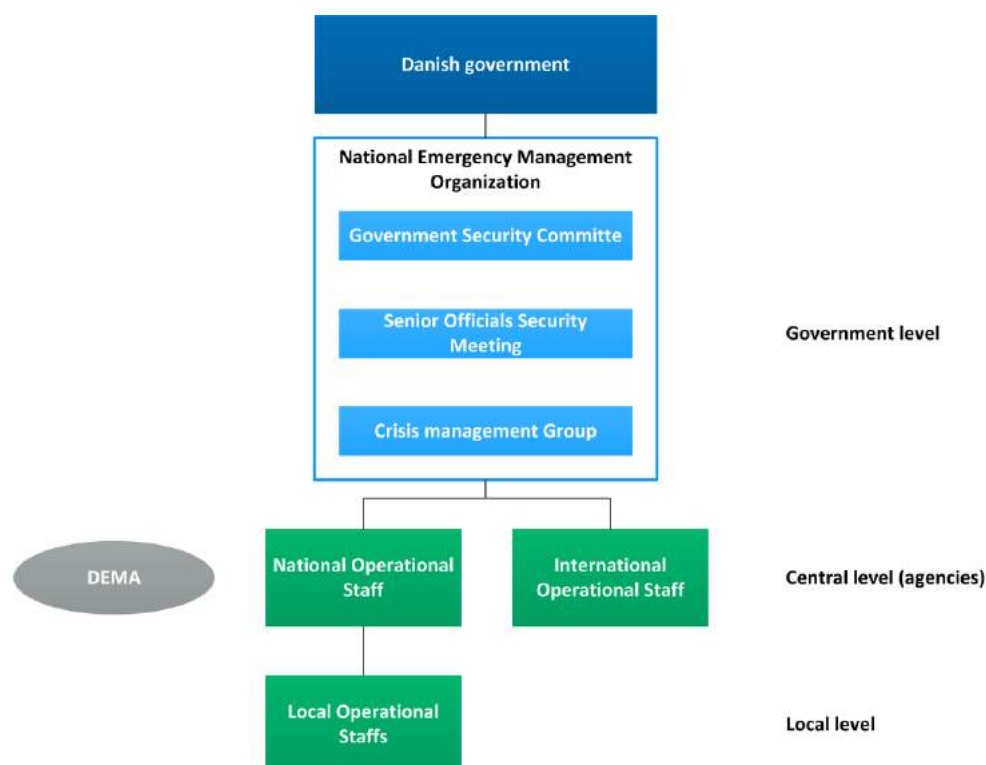
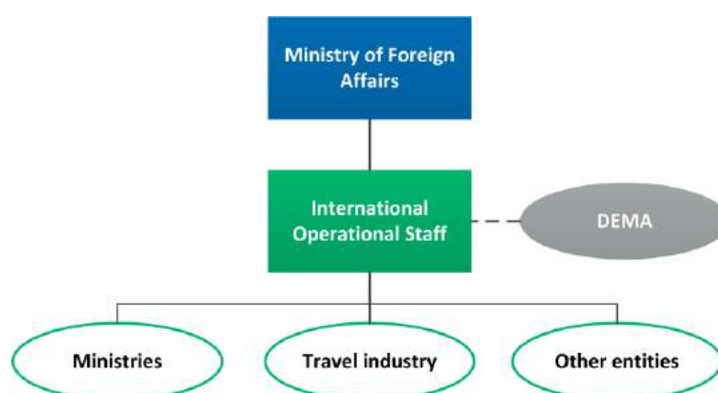


Figure 3.4 Crisis management structure in case of an extraordinary crisis⁷²¹

Organisational cooperation in crisis situations abroad, Danish victims

As indicated in the figure above the IOS is responsible for international crisis management involving Danish people abroad. The IOS is led by the Ministry of Foreign Affairs as this Ministry has all the necessary contacts to retrieve Danish people from abroad. The IOS staff is complemented by representatives of public and private entities. The exact composition of the IOS depends on the crisis itself, e.g. in the recent Ebola pandemic in Africa representatives of the Ministry of Health were involved in the IOS to retrieve Danish people safely, but to ensure quarantine if needed. Often the tourism industry, especially tourism operators, become part of the IOS as they have information on Danish tourists abroad⁷²². DEMA can support the IOS if needed, as the figure below shows.



⁷²¹ Source: DEMA (b), edited by authors

⁷²² Source: DEMA (b)

Figure 3.5 International crisis management structure⁷²³

Organisational cooperation in crisis situations abroad, no Danish victims

DEMA is contact point for international crisis management in case no Danish people are affected by the crisis abroad. In such a crisis DEMA provides humanitarian aid upon request of a foreign governmental body or an international organization. However DEMA cannot take the decision to actually provide humanitarian aid. The decision is made by the Ministry of Defence in concert with the Ministry of Foreign Affairs. The Ministry of Foreign Affairs coordinates and funds the deployment of the Danish governmental humanitarian assistance.

DEMA can provide humanitarian aid in the fields of logistics, transport, management and specialist knowledge alone or in cooperation with other organizations. There is a close cooperation with the EU, UN and NATO as well as with regional partnerships, such as the Nordic International Humanitarian Partnership (IHP).

Dedicated support to the United Nation

The UN can request support from the Denmark in case of disasters happening in other countries. To activate the support the request needs to be addressed to the Ministry of Foreign Affairs and the framework presented in figure 3.5 is followed. The main types of support that can be requested are UNDAC and USAR.

UNDAC

Denmark is Member to UNDAC – United Nations Disaster Assessment and Coordination - since 1993. Experienced emergency managers are available for UNDAC to assist during a crisis. Depending on the type of crisis a manager is appointed. Since 2000 the Denmark has provided assistance 21 times, for example the 2010 flooding in Pakistan, the 2010 flooding in Albania and 2009 typhoon in the Philippines⁷²⁴.

USAR

Denmark also has an urban search and rescue team available. The team was added to the USAR list in 1992 and since 2010 the team is qualified as heavy. This means that at least 55 experts are available and the team can carry out complex technical search and rescue operations in collapsed or failed structures, with special attention top steel structures. The team can assists in five fields: management, search, rescue, medical and logistic. The heavy team can assist during national crises, but on request can be deployed abroad as well. Requirements for the team are⁷²⁵:

A Heavy USAR Team:

⁷²³ Source: DEMA (b), edited by authors

⁷²⁴ Source: UNDAC (2011), 'Emergency response missions'

⁷²⁵ Based on OCHA – INSARAG External classification/reclassification manual 2014

- *Is required to have the equipment and manpower to work at a Heavy technical capability at two separate work-sites simultaneously. A separate work-site is defined as: any area of work that requires a USAR team to re-assign staff and equipment to a different location all of which will require separate logistical support. Generally an assignment of this sort would last greater than 24hrs.*
- *Is required to have both a search dog and technical search capability;*
- *Is required to have the technical capability to cut structural steel typically used for construction and reinforcement in multi-story structures;*
- *Must be able to conduct heavy rigging and lifting operations; and*
- *Must be adequately staffed and logistically sufficient to allow for 24 hour operations at 2 independent sites (not necessarily at the same two sites; the sites may change) for up to 10 days.*

The Danish team currently consists of 73 staff members, who are divided between the five required segments. The team has responded to four international disasters since 1992⁷²⁶:

Table 3.1: Former international engagements

Emergency	# Personnel	Duration
Iran (Bam) earthquake December 2003	39	10 days
Turkey earthquake, November 1999	42	5 days
Turkey Earthquake, August 1999	42	6 days
Turkey earthquake, March 1992	39	10 days

Source: UNOCHA

⁷²⁶ Source: http://vosocc.unocha.org/USAR_Directory/USARTeam.asp

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

No information could be retrieved on the SOP's for DEMA or municipalities. Some operational organisational aspects were retrieved. These are either discussed in chapter 3 or in the next sections.

4.2 Operations planning

National /departmental crisis plan

As explained in chapter 2 one of the main principles on which the Danish crisis management system is based is 'sector responsibility'. This principle means that the authorities or institutions that have the day-to-day responsibility for a given area are also the main responsible actor in times of a crisis. For instance, the Ministry of Health has the day-to-day responsibility for public health, so during a pandemic this Ministry will still be the main responsible actor. The principle of sector responsibility also implies that the responsible organisation or institution has to develop a crisis management plan⁷²⁷.

This obligation is laid down in the Emergency Management Act, article 24.1. In order to ensure that each responsible organisation and institution has a sufficient emergency plan in place the Minister of Defence coordinates this planning effort (article 24.2). Commissioned by the Ministry of Defence DEMA has developed guidelines that might help organisations and institutions to develop a comprehensive crisis plan. The guidelines can be downloaded from the DEMA website, but are only available in Danish.

Areas that do not fall under the competence of any organisation or institutions are covered by the Minister of Defence. His ministry will ensure that all relevant areas to have a dedicated emergency plan. Therefore the focus in Denmark lies on the departmental plans and not on a nationwide emergency plan⁷²⁸.

Regional / municipal plans

As indicated in chapter 2 each region or municipality has the obligation to prepare a regional/municipal emergency plan. This plan has to be adopted by the municipal council (article 25.1 Emergency Management Act) or the regional council (article 25.2). As indicated in the previous paragraph the plans need to incorporate aspects from the relevant Ministerial emergency plans. Each region/municipality needs assess which aspects it needs to include as not all Ministerial plans will be relevant.

⁷²⁷ Source: DEMA (b)

⁷²⁸ Source: Preventionweb (2015)

Also the regional/municipal plans need to be revised when certain development makes the revision necessary. Irrespective of such a development, the emergency plan needs to be revised once during each regional and municipal electoral period (Article 25.3). Elections are held at least every four years⁷²⁹, so on average also the regional/municipal plans are reviewed once every four years.

Private company plans

In addition to the departmental and regional/municipal plans also private companies need to have an emergency plan in place. They need to ensure they are able to continue their activities as long as possible. This is particularly important for companies that provide vital services, e.g. electricity companies, hospitals etc. In their plans these companies have to consider what they have to do so that they are sufficiently prepared for extraordinary events⁷³⁰.

4.3 Logistics support in crises

During the desk research no clear indications have been found that private logistical providers are often used in crisis management. They do not form a clear part of the crisis management chain.

*Military logistical support*⁷³¹

Each couple of years the Danish Government concludes the Danish Defence Agreement, in which the tasks and obligation of the Danish Army, Navy and Air Force are laid down. The latest Defence Agreement was concluded in 2012 and covers the period 2013-2017.

The main focus of this agreement is international security and support. In case of large humanitarian crisis parts of the Danish army, navy and air force can provide support. If needed they can also offer support in armed conflict. Main focus of international actions, however, lies on the protection of Danish civilians currently residing abroad.

In addition, to international security and support the Danish army, navy and air force also conduct several civilian tasks. The tasks are divided into two different groups; the dimensioning tasks and the occasional tasks. The dimensioning tasks consists of a number of regulatory functions, which are conducted on behalf of the Ministry of Defence. Examples are national maritime environmental surveillance and national pollution control at sea. The occasional tasks occur less often and assistance during times of crisis do fall under this task description.

Although the army, navy and air force can provide assistance during times of crisis, their support is additional to the support provided by DEMA. So, if needed they can provide logistics, however no explicit agreements are made on this.

⁷²⁹ Source: <http://elections.sim.dk/local-elections.aspx>

⁷³⁰ Source: DEMA (b)

⁷³¹ Based on: Danish Defence Agreement 2013-2017.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

When a major accident or disaster involves an acute danger of injury or property damage, the Danish police has the possible to warn the Danish population of such risk by means of Denmark's national electronic siren warning system. The DEMA operates and maintains the siren network of 1,078 sirens covering about 80% of the Danish population⁷³². These 1,078 sirens are all fixed sirens and are located at buildings or poles in cities and urban areas with more than 1,000 people. In areas with less than 1,000 no fixed sirens are available; however the police can use mobile sirens to warn people that an emergency has happened. The fixed sirens are equipped with a separate uninterruptible power supply that ensures their operation at all times. In case of a power failure the sirens still operate (DEMA, 2012a).

The siren system can be used nationwide, but can also be operated locally or regionally if this is more appropriate. The system is tested once a year – each first Wednesday in May. On this occasion the sirens are tested out loud. Every night the sirens are silently tested.

If the police decides to use the siren system, two national TV stations, i.e. DR and TV2, will broadcast an emergency message informing the public on the nature of the emergency and providing information on what to do in this specific situation. In addition, both TV stations will use teletext messages to provide relevant information as well.

In crisis situations, a dedicated crisis website kriseinfo.dk will go online. This website was already used for the bird flue crisis. In addition to the website it is possible to follow both DEMA and the Police on Twitter, to obtain relevant crisis related information⁷³³.

The European SOS number 112 can be dialled to reach emergency services - medical, fire and police.

⁷³² Persons who are hard-at-hearing or hearing-impaired may subscribe to a DEMA warning system to receive text messages

⁷³³ Source: <http://www.dr.dk/nyheder/indland/foelg-beredskabsstyrelsen-paa-twitter>

5 Capabilities

5.1 Human resources

As described in chapters 2 and 3 the main responsible bodies for emergency response activities are the municipal fire and rescue services. During the desk research it was not possible to find information on the number of available municipal firefighters and ambulance personnel.

In addition to the municipal fire and rescue services, DEMA can provide aid as well. In order to provide the aid sufficiently DEMA has five rescue centres which are 24/7 in operation. In case of an emergency each of these centre can depart within 5 minutes. The centres are located in such a way that all parts of Denmark can be reached within two hours. A DEMA response team consists of at least 14 conscripts and non-commissioned officers. If DEMA is asked to provide support in the event of major incidents, they are able to muster up to 1,200 people rapidly (e.g. conscripts, non-commissioned officers and volunteers)⁷³⁴.

Volunteers

Volunteers are attached to each DEMA rescue centre. Most of the volunteers available are former conscripts. They have signed a contract with DEMA in which they agree to be available on a voluntary basis. Each national rescue centre has 40-100 of these volunteers available⁷³⁵. In addition to this group of volunteers, are the two voluntary response forces, which fully consist of volunteers. These two forces are located near the rescue centres of Hedehusene and Herning, but the volunteers can be deployed all around the country. Within these two forces approximately 400 volunteers are available⁷³⁶. All DEMA volunteer support the local fire and rescue service and police they are attached to. If needed the volunteers can be sent on missions abroad in response to major incidents, e.g. floods or earthquakes.

Besides volunteers directly contacted to the DEMA rescue centres also the Red Cross and the Danish Civil Protection League can provide volunteers. The Red Cross has around 25,000 volunteers in Denmark⁷³⁷. It should be noted that besides crisis management activities in Denmark itself, these volunteers are also active abroad and therefore might not always be available during times of crisis in Denmark. The Danish Civil Protection League has around 5,000 volunteers available⁷³⁸.

*Involvement of private businesses*⁷³⁹

⁷³⁴ Source: DEMA (2012d)

⁷³⁵ Source: DEMA (b)

⁷³⁶ Source: DEMA (2012d)

⁷³⁷ Source: <https://www.rodekors.dk/>

⁷³⁸ Source: <http://beredskab.dk/bliv-frivillig/opgaver-som-frivillig/#.Vm7A4P5liUk>

⁷³⁹ Source: <http://www.falck.com/en/countries/denmark>

Around 2/3 of all Danish municipalities have outsourced the fire and rescue services to Falck, a private firefighting company. Besides firefighting services Falck also offers ambulance services. According to their annual report of 2013, Falck's ambulance services covered 85% of the market. In Denmark Falck has approximately 10,000 employees, divided between the different market segments that are covered by the company. So in case of large emergencies Falck has the possibility to muster up around 10,000 people to provide support.

5.2 Materiel (non-financial) resources

Material resources at municipal level

As indicated in previous chapters Danish crisis management is organised on two levels; the municipal and national level. The municipalities that have their own fire and rescue service in place also need to ensure that sufficient resources are available to sufficiently carry out firefighting and rescue operations. However, the emergency services themselves will purchase the equipment they need. The equipment they use is not only used in case of large disasters, but can also be used during their daily execution of their tasks. So the fire brigade needs to buy, e.g. the ladder trucks and the fire hoses, while the medical health care needs to purchase the ambulances, stretchers and medicines.

The municipalities that entered into an agreement with Falck have to agree with Falck that Falck ensures sufficient resources are available. Falck will invest and own the resources needed however in the agreement the municipality is entitled to lay down certain requirements. For example, a municipality can ask Falck to guarantee a minimum of fire trucks to be available.

Material resources on national level

If the magnitude of a crisis is such that special equipment and large amounts of personnel are needed, municipalities may call on the assistance of DEMA's five fire and rescue centres all on 24-hour turn-out duty. DEMA's centres may dispatch personnel and equipment within five minutes and reach destinations all over the country within approx. two hours⁷⁴⁰.

On the website of DEMA a detailed overview of the available material can be found, detailed per rescue centre. The material is classified in 5 overall categories:

- Firefighting equipment;
- Rescue equipment;
- CBRN equipment;
- Communication equipment;
- Special equipment.

Each of these categories is subdivided in several more specialised categories (see figure 5.1). For instance, the CBRN equipment category is divided in 14 subcategories, ranging from boats and dedicated CBRN vehicles to protective containers and personnel cleaning devices. Again each of these subdivisions is divided in several individual units. In the category boats all different types of

⁷⁴⁰ Source: DEMA (b)

boats available within DEMA are described. On the right hand side of the website the number of available units per rescue centre are listed (see figure 5.2). For a complete overview of all material available please visit the website⁷⁴¹.

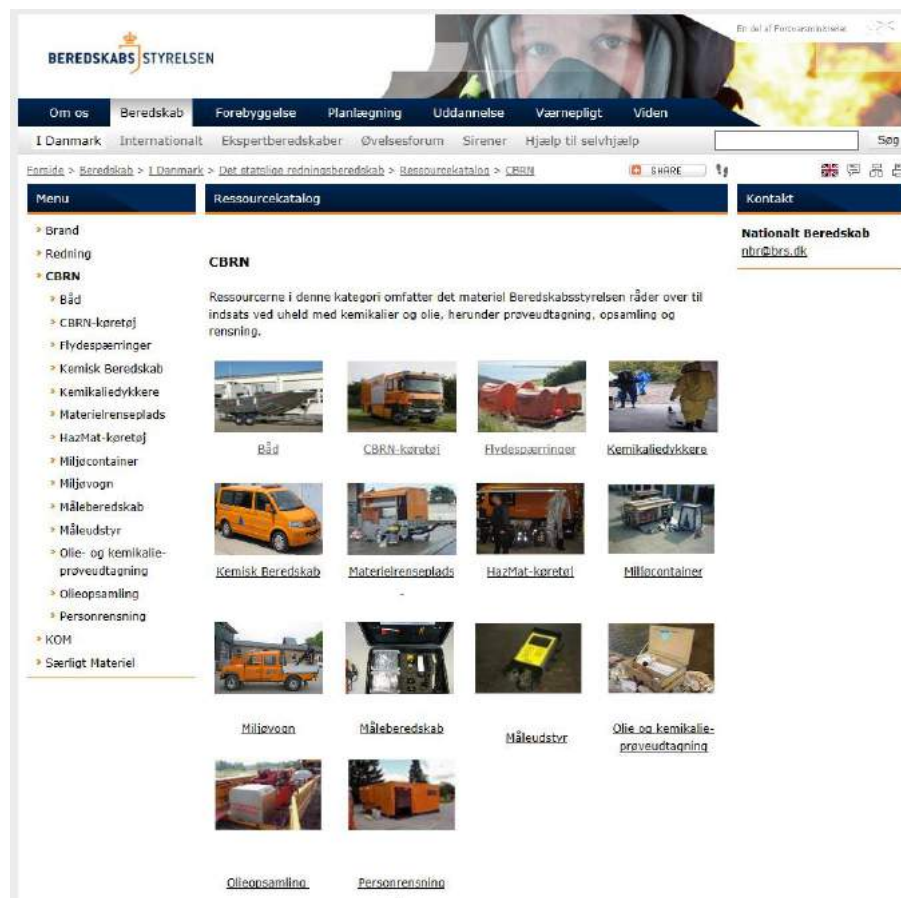
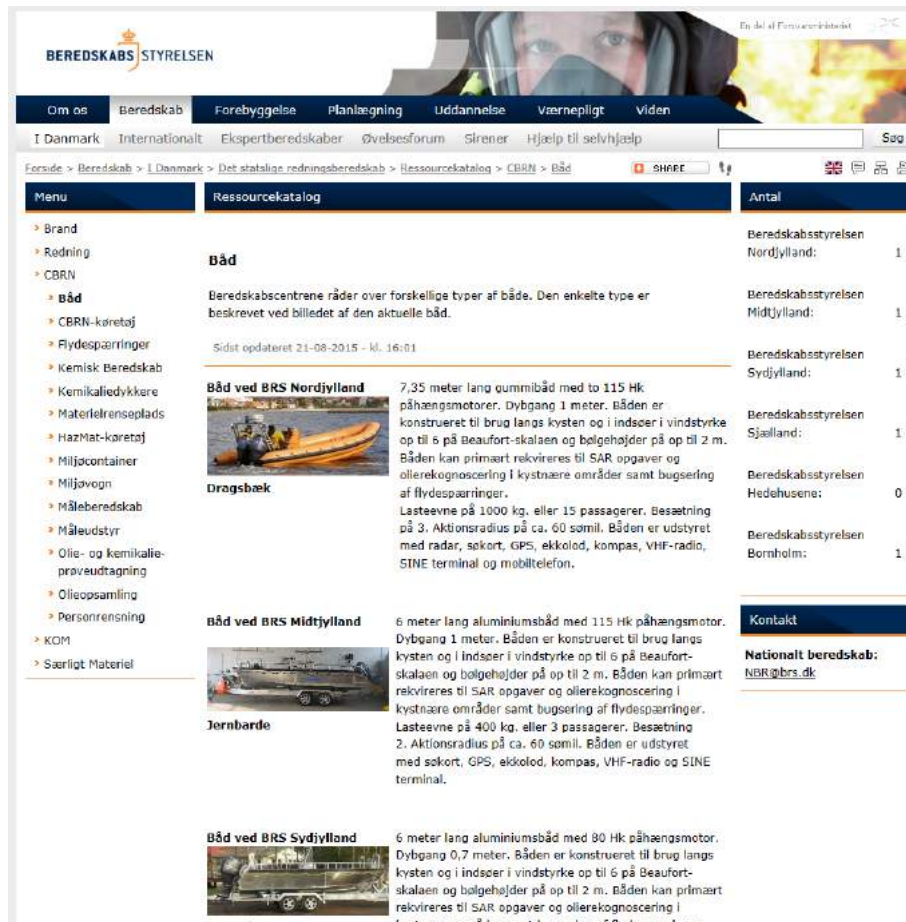


Figure 5.1: Screenshot logistics capacity per subdivision on DEMA website⁷⁴²

⁷⁴¹ Please be aware that the information provided on the website is available in Danish only. To visit the website please use the following link:

http://brs.dk/beredskab/idk/statsligt_beredskab/resursekatalog/brand/Pages/brand.aspx

⁷⁴² Source: brs.dk



BEREDSKABS STYRELSEN

Om os Beredskab Forebyggelse Planlægning Uddannelse Værnepligt Viden

I Danmark Internationalt Ekspertberedskaber Øvelsesforum Sirener Hjælp til selvhjælp

Forside > Beredskab > I Danmark > Det statelige redningsberedskab > Ressourcekatalog > CBRN > Båd

Menu Ressourcekatalog Antal

- Brand
- Redning
- CBRN
 - Båd**
 - CBRN-køretøj
 - Flydespæringer
 - Kemisk Beredskab
 - Materielrenseplads
 - HazMat-køretøj
 - Miljøcontainer
 - Miljøvogn
 - Måleberedskab
 - Måleudstyr
 - Olje- og kemikalieprøvedtagning
 - Olieopsamling
 - Personrensning
- KOM
- Særligt Materiel

Båd

Beredskabscentrene råder over forskellige typer af både. Den enkelte type er beskrevet ved billedet af den aktuelle båd.

Sidst opdateret 21-08-2015 - kl. 16:01

Båd ved BRS Nordjylland	Dragsbæk	Båd ved BRS Midtjylland	Jernbærde	Båd ved BRS Sydjylland
7,35 meter lang gummiåb med 115 HK påhængsmotorer. Dybgang 1 meter. Båden er konstrueret til brug langs kysten og i indseer i vindstyrke op til 6 på Beaufort-skalaen og bølgehøjder på op til 2 m. Båden kan primært rekvireres til SAR opgaver og olierekognoscering i kystnære områder samt bugsering af flydespæringer. Lasteevne på 1000 kg. eller 15 passagerer. Besætning på 3. Aktionsradius på ca. 60 sømil. Båden er udstyret med radar, sekort, GPS, ekkolod, kompas, VHF-radio, SINE terminal og mobiltelefon.		6 meter lang aluminiumsbåd med 115 HK påhængsmotor. Dybgang 1 meter. Båden er konstrueret til brug langs kysten og i indseer i vindstyrke op til 6 på Beaufort-skalaen og bølgehøjder på op til 2 m. Båden kan primært rekvireres til SAR opgaver og olierekognoscering i kystnære områder samt bugsering af flydespæringer. Lasteevne på 400 kg. eller 3 passagerer. Besætning 2. Aktionsradius på ca. 60 sømil. Båden er udstyret med sekort, GPS, ekkolod, kompas, VHF-radio og SINE terminal.		6 meter lang aluminiumsbåd med 80 HK påhængsmotor. Dybgang 0,7 meter. Båden er konstrueret til brug langs kysten og i indseer i vindstyrke op til 6 på Beaufort-skalaen og bølgehøjder på op til 2 m. Båden kan primært rekvireres til SAR opgaver og olierekognoscering i kystnære områder samt bugsering af flydespæringer.

Kontakt

Nationalt beredskab:
NBR@brs.dk

Figure 5.2: Screenshot logistics capacity within subdivision on DEMA website

Possibility to commandeer private goods

Art. 20 of the Emergency Management Act states that the fire and rescue services may demand that any kind of privately-owned tools and equipment and means of transportation together with the necessary crews be made available for the response (Emergency management act, 2009). When article 20 is invoked the owner will, after the rescue operation, regain his property.

The Emergency Management Act also contains an article relating to expropriation. Based on article 38 the Minister of Defence or an individual authorised by this Minister may initiate expropriation of private property for the use of fire and rescue services. The expropriation can include means of transport as well. The Act allows the Minister or the individual authorised by him to seize the goods without a court order in case of a crisis. This implicates that the Minister or the individual authorised by him do not have this right in case of a minor incident, e.g. a small fire.

5.3 Training⁷⁴³

The main trainings for professionals are organised by DEMA and held on their training schools located in Tinglev, Snekersten and Birkerød (see chapter 3 for the exact locations). At these schools approximately 900 conscripts per year, follow courses to become a qualified fire-fighter. The average duration of their training is 3 months. Also a more elaborate training is offered. On a yearly basis around 500 conscripts follow this course which has a duration of 6 months. Besides fire-fighting courses, these conscripts also follow courses related to hazardous materials (hazmat) and rescue services. After completion of the 6 months training course the conscripts likely start working for the municipal fire and rescue service or the private fire service.

DEMA Emergency Services College

The trainings described above are the primary trainings for conscripts. Besides these more basic training DEMA also offers more advanced trainings. Such trainings can be followed at the DEMA emergency Services College, which is located at the training centre Tinglev. The trainings given here target sub-officers and officers at the municipal fire and rescue services, and representatives from other authorities and the private sector. The trainings deal with operational and tactical decision making and the knowledge obtained can be used in emergency planning.

The College has a training ground of 13,000 km² available on which incident command situations can be re-enacted. The training ground exists of different types of buildings and ruining in which fire and rescue operations can be conducted. Besides training sub-officers, officers and representatives the grounds are also used to test new emergency response equipment and methods, e.g. new ways to extinct a fire. The figure below shows an air photograph of the training ground.



Figure 5.3 Air photograph of the Tinglev training ground⁷⁴⁴.

⁷⁴³ Based on: <http://brs.dk>

⁷⁴⁴ Source: <http://brs.dk>

DEMA Staff College

The DEMA staff college is part of the training school in Snekersten. Main aim of the staff college is to manage the development and implementation of education programs meant for employees of DEMA itself and the municipal fire and rescue service. Contrary to the college in Tinglev, the college in Snekersten mainly focus on trainings in preparedness (the college in Tinglev focuses on response).

DEMA's international courses

The two above mentioned colleges and the basic trainings focus on Danish first responders. Besides these national oriented trainings, DEMA also organises international trainings. These trainings can be followed by Danish first responders, but also by representatives of international organisations and the foreign fire-fighters. Currently, DEMA is, amongst others, involved in the following international projects:

- Lead partner for European Civil Protection training programme on six annual courses, Information Management Course (IMC), International Coordination Course (ICC), and Security Course (SEC);
- Partner conducting five to six Operational Management Courses (OPM);
- Partner in the European Union's IPA programme on Civil Protection Cooperation for the candidate countries and potential candidates.

Trainings in volunteer organisations

Also the two largest volunteer organisations, the Danish Red Cross and the Danish Civil protection League to offer trainings for their volunteers. The trainings of the Danish Red cross mainly focus on first aid courses. The training program of the Danish Civil Protection League is more elaborate and consists, amongst others, of trainings concerning food provisioning and temporary housing, fire service, rescue work, use of rescue dogs, communication and SAR-teams (Search and Rescue). They training program is supplemented management trainings in order to better select members for the organisations. Also first aid courses for members and the general public are organised. Focus of these trainings is on the capability to extinguish small fires and handle accidental situations before they become major disasters (EC, 2014).

5.4 Procurement

5.4.1 (European) procurement regulations

The procurement of public contracts needs to be in line with the principles of European treaties and especially with the free movement of goods services, capital and people. Furthermore the procurement needs to comply with the principles of equality, proportionality etc. For some types of procurement additional regulations are codified in directives. Within the European legislation, three different procurement directives apply. These directives are mutually exclusive meaning only one of the directives applies to the public procurement. Directive 2014/25/EU (on procurement of utilities) and directive 2009/81/EC (on procurement in the defence and security industry) are topic specific. If

these specific directives do not apply, public sector directive 2014/24/EU is applicable, which is the replacement of directive 2004/18/EC. The aim of the new directive is to simplify the rules on public procurement; improve the participation of SMEs and stimulate cross border joint procurement.

Stimulation of cross border joint procurement is helpful in case of a major internal crisis or a cross border crisis. The directive states in the preamble that contracting authorities should be able to choose to jointly provide their public services in cooperation with other authorities, without being obliged to use any legal form. These services don't have to be identical. The cooperation does not require all participating authorities to fulfil the obligations of the contract, as long as there is a commitment to contribute to the cooperative performance. The preamble points out that there are difficulties in cross border joint procurement. Therefore new rules have to be made. In these rules, the conditions for cross border procurement have to be clarified, as well as the applicable regulations. In addition, contracting authorities should be able to set up joint entities established under national or EU law. The new rules are specified in article 39 of the regulations.

If the procurement is executed by a centralised purchasing body located in another MS, the procurement shall be conducted in accordance with the national regulations of the MS where the purchasing body is located. In addition, it may possible that multiple contracting authorities located in different MS jointly award public contracts, conclude framework agreements or operate dynamic purchasing systems⁷⁴⁵. Participating contracting authorities will then conclude an agreement that determines all responsibilities of the parties and the internal organisation of the procedure. As said before, the contracting authorities can set up a joint entity. The parties shall decide on the applicable rules on procurement. They can choose the rules of the MS where the entity has its registered office or where the entity carries out its activities.

This project evolves around the procurement related to crisis management, for example the procurement of ambulances, emergency packs or trainings. The utilities directive applies to gas and heat, electricity, water, transport services, ports and airports and postal services (article 8-13). The directive on defence and security applies to supply of military equipment and sensitive supplies. The majority of procurement in crisis management will be procured by normal NCCs and local authorities like the fire department or police and will not be secret. So in most cases the public sector directive (2014/24/EU) is applicable. This chapter will therefore focus on this directive. Keep in mind that the other directives can also be applicable, for example if the army is used to solve a major crisis. The directive is addressed to Member States and has no direct effect on the national regulations. The directive needs to be implemented first.

Scope of the public sector directive

The public sector directive applies to procurement by contracting authorities with respect to public contracts as well as design contests whose value is estimated to be not less than (article 4):

- € 5.186.000 for public works contracts;

⁷⁴⁵ Source: article 39 public sector directive 2014/24/EU

- € 134.000 for public supply and service contracts and design contests, awarded by central government;
- € 207.000 for public supply and service contracts or design contests awarded by sub-central contracting authorities.
- € 750.000 for public service contracts for social and other specific services listed in Annex XIV.

This directive should not apply to certain emergency services where they are performed by non-profit organisations or associations, since the particular nature of those organisations would be difficult to preserve if the service providers had to be chosen in accordance with the procedures of the directive. Furthermore the directive does not apply to public contracts with the purpose of providing public communication networks or electronic communication services; public contracts organised pursuant to international rules; several types of service contracts, e.g. rental, legal services and employment contracts and service contracts based on exclusive rights; and last, public contracts between entities within the public sector (articles 8-12).

5.4.2 Procurement procedures

On a European level, procurement is executed by the European Commission. The public sector directive contains several award procedures:

- open procedure,
- restricted procedure,
- competitive procedure with negotiation,
- competitive dialogue,
- negotiated procedure without prior publication.

The *open procedure* applies when no other procedure is chosen. In the open procedure, the contracting authority submits a call for tenders. Interested companies may submit a tender. The best offer is chosen, based on the selected award criteria (article 27).

The *restricted procedure* consists of two phases. In the first phase a call for expression of interests is set out. Interest candidates may submit an invitation to tender. The contracting authority will then invite the most suitable candidates to submit a tender. The contracting authority will award the contract to the best tender, based on the selected award criteria (article 28).

In the *competitive procedure* with negotiation any interested candidate may submit a request to participate in the negotiations, in response to a call for competition. In this call for competition, the contracting authority has provided a description of their needs and the characteristics of the works or services to be procured. Only the interested candidates that are invited may submit an initial tender, which will be the basis of the negotiations (article 29). In several cases the negotiation procedure can be used without prior publication, for example when the public contract contains a

creative achievement; when there is no competition; when intellectual property rights need to be protected, or when there are reasons for extreme urgency (article 32).

In the *competitive dialogue* any interested candidate can submit a request to participate in response to a contract notice given by the contracting authority. The contract notice provides the information on and the needs and requirements of the contracting authority, as well as the chosen award criteria. The selected interested candidates will join the competitive dialogue, in which the means best suited for satisfying the contract will be defined (article 30).

A new procedure within this directive is the *innovation partnership*. In the innovative partnership procedure, in response to a contract notice, each economic operator may submit a request to participate in the partnership. The economic operator can do so by providing information requested by the contracting authority. The innovation partnership can be set up with one partner or several partners. Only the economic operators invited by the contracting authority participate in the procedure. After each phase, the contracting authority may decide after each phase to terminate the partnership or reduce the number of partners within the partnership, based on the targets.

According to article 26, the open procedure and restricted procedure are the standard procedures to apply in case of procurement. The other procedures can be used in a limited number of situations, for example when the service is innovative, or when the technical specifications can't be determined (art. 26, sub 4.).

Contracting authorities can use framework agreements, provided that they apply the procedures in this directive. The agreement can not exceed four years. Contracts within the agreement will be awarded according to the rules in article 33.

In most procedures the candidates are chosen with the use of selection criteria. The selection criteria may relate to suitability to pursue the professional activity; economic and financial standing and technical and professional ability. All criteria need to be related and proportionate to the matter of the contract (article 58).

5.4.3 *National regulations and procedures*

Scope

In Denmark, the old procurement directives are implemented without any exemptions. The Danish Tender Act is applicable to all procurement outside the scope of the EU directives, because the threshold value isn't met. In other words, the Danish rules are secondary in relation to the European directives. The Danish act has no threshold value on public works; the value for public services is DKK 500,000

Procurement is executed by the bodies codified in Appendix I of the European directive, which are the state, regional and local authorities and bodies governed by public law. Private entities are only subject to the Danish Tender Act if the public contract is publicly funded.

Procedures

The contracts to which the European directive is applicable all the European procedures are permitted. If the procurement is within the scope of the Danish Tender Act, three different procedures are available: public tenders, restricted tenders or informal bids. There are no restrictions on the use of the procedures, although the contracting authority needs to make sure there is enough competition.

In a public tender the contracting authority announces its intents to contract. This announcement includes technical ability and economical standing of the tenderer. Furthermore the contracting authority should announce if the contract is awarded to the most economically advantageous tender, or the lowest price.

A restricted tender can be performed with or without a prequalification round. The contracting authority In case of a prequalification round, the contracting authority will announce the tender in the press or electronic media. If there is no pre-qualification round, the contracting authority directly invites the chosen participants.

The contracting authority has the authority to negotiate with the tenders, but only with the lowest bidder or with the three most economically advantageous tenderers. This may not result in a substantial change of the project or award criteria.

Informal bids can only be used when the estimated value of the contract is below DKK 3,000,000.

Award criteria

The Danish Tender act prescribes two award criteria: the lowest price or the most economically advantageous offer. If the most economically advantageous offer is used, the contracting authority shall list and explain the sub-criteria, with the relative weight, linked to the public contract. When the lowest price or the most economically advantageous tender has been identified, the tender is awarded to the winner.

5.5 Niche capabilities

Private fire and ambulance services

Danish fire and rescue services can be carried out by a privately owned company (according to article 13 emergency Management Act). Currently, around 2/3 of all Danish municipalities has entered into such a contract with a privately owned provided (65 out of the 98 municipalities). The only private

operator in Denmark is Falck, who therefore offers its services to 2/3 of all the municipalities⁷⁴⁶. Besides firefighting services Falck is also responsible for 85% of all ambulance service provided in Denmark.

International energy preparedness

A niche preparedness approach of the Nordic countries is found in the energy supply preparedness. The Nordic countries work closely together to create an integrated electricity supply network. When one of the participating countries involved, is confronted with a power shortage, other countries can, via cross border connections, supply energy. This limits the chance of severe blackouts in crisis situations⁷⁴⁷.

⁷⁴⁶ Source: Falck (2014)

⁷⁴⁷ Source: The Nordic Forum (2005)

Resources

Legislative acts

At national level

Overall, the legislative framework for Danish civil preparedness is mainly based on:

- The Constitutional Act of the Kingdom of Denmark
- Acts (three readings in the Parliament)
- Statutory orders/administrative directives/decrees (depending on the legal authority)
- Circulars
- Guidelines.

The major legislative framework for civil preparedness is the following:

- Emergency Management Act (Consolidated Act No. 660 of 10 June 2009, LBK no. 137 of 01/03/2004 as amended);
- Act on Shelters (Beskyttelsesrumsloven (LBK nr. 732 of 20. August 2003);
- Act on Safety and Environmental Control of Nuclear Installations (Lov om sikkerhedsmæssige og miljømæssige forhold ved atomanlæg (LBK no 244 of 12/05/1976);
- At ministerial level;
- At ministerial level, there is a number of statutory orders governing civil preparedness within the sphere of responsibility of the respective ministry:
- Order of the Ministry of Environment No 1156 of 18 November 2005 on the control of major accidents involving dangerous substances (Miljøministeriets bekendtgørelse nr. 1156 af 18. november 2005 om kontrol med risikoen for større uheld med farlige stoffer);
- Order of the Ministry of Defence no 765 of 3 August 2005 regarding risk-based municipal fire and rescue service as amended by Order no 872 of 6 July 2007 (Forsvarsministeriets bekendtgørelse nr. 765 af 3. august 2005 om risikobaseret kommunalt redningsberedskab som ændret ved bekendtgørelse nr. 872 af 6. juli 2007).

Inter-ministerial cross-cutting co-ordination

- Legal acts such as The Police Act (Law No. 444 of 9 June 2004 as amended) on general co-ordinating powers;
- The Danish Emergency Management Act on co-ordination of efforts at the accident site;
- At international level;
- International intervention is governed by political agreements. Denmark participates in the EU emergency and crisis co-ordination arrangements (CCA), and the Ministry of Foreign Affairs acts as the Danish point of contact in relation to the CCA;
- Military interventions are governed by the Defence Law (Law no 122 of 27 February 2001), while civil interventions are governed by the Civil Preparedness Act (LBK no. 137 of 01/03/2004 as amended);

- Regional agreements.

The Council of the Baltic Sea States (CBSS).

Other normative acts

-

Official documents (white papers, strategies, etc.)

- Danish Defence Agreement 2013 -2017 (20012(
- Danish Government (2008) Danish strategy for adaptation to a changing climate
- Nordic Energy Regulators (2006) 'Handling extreme situations in the Nordic Countries Report'
- Rigsrevisionen (2013) 'Report to the Public Accounts Committee on the Danish government's planning and coordination of the emergency preparedness for major incidents and disasters'
- UNDAC (2011), 'Emergency response missions'

Online resources (e.g. websites of key CM organizations)

- <http://brs.dk>
- <http://beredskab.dk/bliv-frivillig/opgaver-som-frivillig/#.Vm7A4P5liUk>
- <http://www.dr.dk/nyheder/indland/foelg-beredskabsstyrelsen-paa-twitter>
- <http://elections.sim.dk/local-elections.aspx>
- [http://www.emdat.be/result-country-profile?disgroup=natural&country=dnk&period=1900\\$2014](http://www.emdat.be/result-country-profile?disgroup=natural&country=dnk&period=1900$2014)
- <http://faolex.fao.org/docs/pdf/den140206.pdf>
- http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=114806&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL
- <http://www.falck.com/en/countries/denmark>
- <http://www.fmn.dk/eng/allabout/Pages/Defenceexpenditure.aspx>
- <http://naturstyrelsen.dk/media/nst/Attachments/planlovenpengelsk2007.pdf>
- <https://www.rodekors.dk/>

Publications

- Alliance Developments Work (2014), 'World risk report 2014'
- CIA World Factbook (2014) Denmark, <https://www.cia.gov/library/publications/the-world-factbook/geos/da.html>
- DEMA (a) (year of publication unknown) 'The Danish emergency management agency'

- DEMA (b) (year of publication unknown 'Preparedness Planning and Crisis Management in Denmark - a short overview')
- DEMA (c) (year of publication unknown, 'DEMA's Approach to Risk and Vulnerability Analysis for Civil Contingency Planning')
- DEMA (2012a), 'Sounding of sirens - Facts'
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- DEMA (2012d), 'Assistance form the Danish Emergency Management Agency'
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<https://wcd.coe.int/com.instranet.InstraServlet?>
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- Policy research cooperation (year of publication unknown) 'Denmark – Country overview and assessment'
- Politi (year of publication unknown), 'Police in Denmark, the Faroer Islands and Greenland'
- Preventionweb (2015), 'Denmark – National progress report on the implementation of the Hygo Framework for Action (2013-2015)'
- Statistics Denmark (2015), 'Denmark in figures 2015' **Fehler! Hyperlink-Referenz ungültig.**
- Stone Wyman, J. (2012), 'Emergency management in Denmark: Lessons learned at home and abroad'
- The Nordic Forum (2005), 'Nordic Contingency Planning and Crisis Management'
- United Nations Office for the Coordination of Humanitarian Affairs (2014), 'INSARAG External Qualification / Reclassification Manual'
- United Nations University (2014), 'World risk index'
- Website Denmark (2012) <http://denmark.dk/en/quick-facts/facts/>

Expert interviews

Unfortunately no expert interviews were conducted despite multiple attempts to do so. DEMA did not have the capacity (other urgent priorities) and the Danish Red Cross did not respond either.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

ESTONIA

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Philip Spassov)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The Estonian crisis management system is based on measures that can be taken in order to protect human life, property and the environment during civil emergencies. In Estonia the highest authority responsible for emergency and disaster management is the Ministry of Interior. It is responsible for policy formulation and its execution in the area of civil security. At regional level county governors are directly responsible to the Minister of the Interior for crisis management matters. The county governor is the highest crisis management authority at regional level. At local level the main body responsible for civil protection is the local government council which has established the local crisis management committee chaired by the mayor.



Figure 4. Logo of the Estonian Rescue Board⁷⁴⁸

The Estonian Rescue Board is directly subordinate to the Ministry of Interior and has a key role in representing Estonia in various international forums such as the UN, EU and NATO and other relevant civil security organisations. Another national government institution under the authority of the Ministry of Interior is the Emergency Response Centre responsible for processing emergency calls to the emergency 112 number and sending out rescue teams to the place of the emergency.

As in the other Baltic Region States the organisational structure is centralised, i.e. coordinated and mostly organised by the central national civil protection authority, as is the case with Estonia, Latvia, Lithuania. Additionally, the use of private rescue services is low in the Baltic Countries.⁷⁴⁹

The Defence Forces could be deployed in response of crisis or disaster, but only in cases where all the other crisis management capabilities of the state have been exhausted or where the required resources or capabilities are only available to the Defence Forces.

The civil protection expenditures are approximately 0.6% of GDP of Estonia.⁷⁵⁰

The most important non-profit and volunteer organisations in Estonia are regarded the Red Cross, the Estonian Volunteer Fire-Fighters Union, the Estonian Association of Fire and Rescue Chiefs, and

⁷⁴⁸ Source: https://en.wikipedia.org/wiki/Estonian_Rescue_Board

⁷⁴⁹ EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region, p.13

⁷⁵⁰ http://ec.europa.eu/echo/files/civil_protection/vademecum/ee/2-ee-1.html, last accessed 18.12.2014

the Estonian Life Saving Association and Defence League, who have also been given the task of assisting in rescue work.

The main regulative framework for civil protection and emergencies is defined by the Emergency Act and the Rescue Act of Estonia.

The National Security Concept of the Republic of Estonia is a key document that establishes the objectives, principles and directions of security policy. The National Security Concept highlights crisis management as one of the essentially important tasks. Another important conceptual document is the Strategy of the Estonian Rescue Board 2015-2025 which plans the Board's activities in a ten year timeframe.

The systems for training in the field of civil protection are quite different in the Baltic region, however they share some basic features. Education in civil protection and rescue has a legal foundation in all of the Baltic Region countries. Basic and advanced education at the national level is standardised through the use of certificates, as well as the development of educational and training curricula. All of the Baltic region states have specialised schools and colleges which carry out education in civil protection and rescue area.⁷⁵¹

Estonia has signed regional and multilateral provisions of the Council of Europe, the EU, the NATO and the OSCE for assistance in crisis situations. Estonia is also an active initiator in the field of maritime cooperation and of strategic and operational dialogue among the Baltic Sea countries.

Potential niche capability in which Estonia could realistically contribute to the European crisis management community is the development of software solutions in the cyber defence and the programming of autonomous platforms and systems field of expertise. Estonia could provide software solutions and expertise from which EU member states could benefit and establish new ways for cooperation in the cyber security field.

⁷⁵¹ EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region, p.14

Table of Contents

E S T O N I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	600
Overview.....	601
Table of Contents	603
List of Figures	605
List of Abbreviations.....	606
1 Policy	607
1.1 Risk Assessment	607
1.2 Policy and Governance	609
1.2.1 Strategy scope and focus	611
1.2.2 Monitoring and analytical support to policy making; R&D	612
1.2.3 Policy for Prevention	613
1.2.4 Policy for Preparedness	614
1.2.5 Policy for Response	616
1.2.6 Policy for Relief and Recovery	617
1.3 Financing	618
1.3.1 Investing in preparedness	618
1.3.2 Investing in consequence management	619
1.4 Policy review, Evaluation & Organisational Learning	620
1.4.1 Post-Disaster Assessment	620
1.4.2 Departmental Lessons Learned systems	620
1.4.3 Centralised (national) Lessons Learned system	621
1.4.4 International exchange for Lessons Learned	622
1.4.5 Regular policy reviews	622
1.5 Resilience	622
1.6 Information sharing and data protection	623
2 Legislation	626
2.1 Crisis (emergency, disaster) management concept.....	627
2.2 General crisis (emergency, disaster) management law	627
2.3 Emergency rule	628

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	629
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	631
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	631
2.7	Legal regulations for international engagements of first responders and crisis managers	632
3	Organisation	634
3.1	Organisational chart.....	634
3.2	Organisational cooperation	638
4	Procedures	641
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	641
4.2	Operations planning.....	641
4.3	Logistics support in crises	642
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	642
5	Capabilities	644
5.1	Human resources	644
5.2	Materiel (non-financial) resources	645
5.3	Training	646
5.4	Procurement	648
5.4.1	Procurement regulation	648
5.4.2	Procurement procedures	648
5.5	Niche capabilities	648
	Resources	650
	Legislative acts	650
	Other normative acts	650
	Official documents (white papers, strategies, etc.)	650
	Online resources (e.g. websites of key CM organisations)	650
	Publications	651
	Expert interviews	652

List of Figures

<i>Figure 1. Logo of the Estonian Rescue Board</i>	<i>601</i>
<i>Figure 2 Organisation of Estonian Civil Protection.....</i>	<i>635</i>
<i>Figure 3 Organisation of Estonian Rescue Services.....</i>	<i>636</i>

List of Abbreviations

CERT	Computer Emergency Response Team of Estonia
CRBN	Chemical, Radiological, Biological, Nuclear
EDRT	Estonian Disaster Relief Team
EFSCA	European Fire Service Colleges' Association
EISA	Estonian Information System's Authority
ERB	Estonian Rescue Board
ERC	Estonian Red Cross
EURASHE	European Association of Institutions in Higher Education
JATE Project	Building Cross-border Capacity to Perform Joint Activities in Tough Environment
MAppERS	Mobile Application for Emergency Response and Support
NISPAcee	Network of Institutes and Schools of Public Administration in Central and Eastern Europe
OSCE	Organization for Security and Cooperation in Europe
RIA	Estonian Information System Authority
SDC	Swiss Agency for Development and Cooperation
VSR	Virtual Situation Room

1 Policy

According to article 2 of the Emergency Act of Estonia “*emergency is an event or a chain of events, which endangers the life or health of many people or causes significant proprietary damage or significant environmental damage or severe and extensive disruptions in the continuous operation of vital services and responding to which requires the prompt co-ordinated activities of several agencies or the persons engaged by them*”; while Crisis Management is described as ‘*a system of measures, which includes preventing emergencies, preparing for emergencies, responding to emergencies and mitigating the consequences of emergencies.*’⁷⁵²

In other words, crisis management is defined as national arrangements that are prepared and implemented by governmental organisations in cooperation with local governments, private enterprises and non-profit organisations in order to guarantee safety of the population and continued functioning of vital services during an emergency.⁷⁵³

Key crisis management activities are considered (i) the identification of potential emergencies or risk analysis; (ii) to prevent or reduce the severity of consequences of emergency measures in the development and implementation; and (iii) the action plans for emergency action (i.e. emergency plans).⁷⁵⁴

The Government of the Republic of Estonia has the responsibility to develop a national crisis management policy, and to direct and co-ordinate the crisis management activities of ministries, the State Chancellery and county governors. In addition, It also approves the national crisis management plan and forms a permanent crisis management committee in order to harmonise and co-ordinate crisis management activities.⁷⁵⁵

1.1 Risk Assessment

Estonia’s risk assessment mechanism/procedure is specified in the *Emergency Act*, which is in force since 2009. Further, risk assessments the Ministry of Interior establishes guidelines for preparing an emergency risk assessment through a regulation named - *Guidelines for preparing continuous operation risk assessments*, which is in force since June 2010.

The Emergency Act defines emergency risk assessments as a document, which describes the following aspects which are relevant on the national and, if necessary, on the regional and local government level:

⁷⁵² Emergency Act of Estonia, Chapter I, art.2 (2)

⁷⁵³ International CEP Handbook 2009, Civil Emergency Planning in the NATO/EAPC Countries, p.77

⁷⁵⁴ <http://www.rescue.ee/642>, last accessed 18.09.2014

⁷⁵⁵ Ibid

- the emergency;
- the threats and hazards causing the emergency;
- the probability of the emergency;
- the consequences of the emergency;
- other important information related to the emergency;
- references to models, source materials and other such information, on the basis of which the risk assessment is prepared.⁷⁵⁶

The Government establishes list of emergencies, concerning the preparation of risk assessments and appoints competent agencies of executive state power to prepare the assessments. At least once in every two years the Government must assess the need to amend the list of emergencies, concerning which risk assessment has to be prepared.⁷⁵⁷

The procedures for organising the preparation of risk assessment of important social services called vital services are described by the “Guidelines for risk assessment”. These vital services include healthcare, safety and security as well as the economic and social welfare of the public.⁷⁵⁸

The institution or person preparing a risk assessment submits it to the relevant institution that organises the continuous operation of vital services on a yearly basis. There are 43 vital services and approximately 140 provides in Estonia.⁷⁵⁹

According to “Guidelines for risk assessment”, a risk assessment consists of the following parts:

- table of contents and a list of persons engaged in preparing the risk assessment;
- analytical part;
- necessary tables and diagrams prepared for performing the assessment;
- risk matrix;
- summary of the risk assessment.⁷⁶⁰

The Government forms a permanent crisis management committee which provides an opinion on the guidelines for preparing emergency risk assessments and operations. It also approves the risk assessment summaries of emergencies.⁷⁶¹ At regional level, County Governors are directly responsible to the Minister of the Interior for the review of the risk analysis of an emergency of a certain region. At local level, the head of the local government crisis management committee is the

⁷⁵⁶ Emergency Act of Estonia, Chapter II, art.6

⁷⁵⁷ Ibid.

⁷⁵⁸ Guidelines for risk assessment, art.2 (1)

⁷⁵⁹ Urmo Sutermae PowerPoint presentation 30.09.2015, available at:

<https://www.enisa.europa.eu/activities/Resilience-and-CIIP/workshops-1/2015/cyber-security-strategies-critical-information-infrastructures-protection-and-ics-scada-event/ciip-in-estonia>

⁷⁶⁰ Guidelines for risk assessment, art.4 (1)

⁷⁶¹ Emergency Act of Estonia, Chapter I, art.3 (1)

rural municipality mayor or the city mayor, who is responsible for reviewing the risk assessment of a certain region.⁷⁶²

In addition, the crisis management plan of a county has to be reviewed by the county crisis management committee, which on its part presents opinion to the county governor. County governors shall review crisis management plans as necessary but not less frequently than once in every two years. An amended crisis management plan shall be submitted to the Minister of Internal Affairs for approval.⁷⁶³

Key risks and former disasters

The key risks and areas of concern in Estonia include extreme weather conditions, more precisely winter storms, extreme temperature, forest fire and flooding. Major transport and technological accidents, such as the sinking of the MS Estonia in 1994 and the Copterline helicopter crash in 2007, have also occurred and have resulted with significant casualties.⁷⁶⁴

The „Gudrun“ storm, which struck the Baltic Sea area and caused considerable floods in the Estonian towns of Pärnu and Haapsalu in 2005, raised enormous attention among population, crisis managers and authorities.

In addition, the fact that more than 20% of the terrain in Estonia is covered with forests increases the risk of fires. Measures are taken by the County Rescue Services to prepare forest fire suppression plans each spring. A development project was launched by the Estonian Forestry Board to increase the fire resistance of forests. Estimation reveals that on yearly basis over 800 forest fires occur in Estonia and it is considered as one of the main hazards.⁷⁶⁵

Estonia's security could be threatened not only by natural disasters and catastrophes, but also by infectious diseases, radiation and transport accidents. Despite the fact that Estonia does not possess nuclear plants, the threat of radiation accidents is increased by older type nuclear power plants that are still in operation in the Baltic Sea area. Intensified ship traffic and the increase in the transport of oil and oil products in the Baltic Sea area increase the threat probability of a major marine disasters or extensive environmental pollution.⁷⁶⁶

1.2 Policy and Governance

The Estonian civil protection could be best described as centralised due to the fact that the different ministries and agencies are responsible in their respective functional fields for civil emergency issues,

⁷⁶² http://ec.europa.eu/echo/files/civil_protection/vademecum/ee/2-ee-1.html#bilagr, last accessed 18.09.2014

⁷⁶³ Emergency Act, p.7

⁷⁶⁴ ANVIL Project Country Study: Estonia, p.8

⁷⁶⁵ Strategic Evaluation on Environment and Risk Prevention Under Structural and Cohesion Funds for the period 2007-2013 – National Evaluation Report for Estonia, p.62

⁷⁶⁶ National Security Concept of Estonia, p.9

while the Ministry of the Interior has overall responsibility for civil protection and emergency situations.

The civil security system is two-dimensional – on one hand, the functional responsibility allows a certain ministry to be in charge of a specific emergency or disaster management duty at national, regional and local levels. On the other hand, the area of responsibility is based on geographic mapping of respective areas.

At national level the highest body for civil emergency planning is the Governmental Crisis Committee. The committee's tasks are (i) to monitor national policy on crisis management; (ii) to coordinate crisis management on the ministerial and county levels and (iii) to present proposals to the national government regarding crisis management issues. The Governmental Crisis Committee is supported by the Ministry of the Interior.⁷⁶⁷

At regional level county governors are directly responsible to the Minister of the Interior for crisis management matters. The county governor is the highest crisis management authority at regional level and chairperson of the County Civil Protection Committee.⁷⁶⁸

At local level the main body responsible for civil protection is the local government council which has established the local crisis management committee chaired by the mayor or an equivalent official.⁷⁶⁹

In addition, the Estonian Rescue Board is a key government institution under the jurisdiction of the Ministry of the Interior and has a leading role in planning preparedness for emergencies and the operational management of the four regional rescue centres. It is also responsible for the development and implementation of national rescue policies. There are four territorial interagency emergency preparedness committees that are managed by the Estonian Rescue Board.⁷⁷⁰

The Estonian Rescue Board is actively involved in the crisis management mechanism at local, regional and national levels. The county governors report directly to the Minister of Interior and are responsible for crisis management development and planning at regional level. The Board examines and reviews the regional dimensions of the national crisis management system, the regional risk map and the overall preparedness to respond to risks. The Estonian Rescue Board also organizes crisis management training, supports the regional civil protection agencies and establishes and maintains the territorial crisis committee which is chaired by the head of the regional crisis centre.

The Board has the responsibility to review and implement the national crisis management systems at local level. Other key duties include risk mapping, development and enhancement of disaster prevention and maintaining preparedness. Additionally, the Rescue Board provides training related to preparedness, responsiveness and consequence management. It also provides support in terms of

⁷⁶⁷ International CEP Handbook 2009, Civil Emergency Planning in the NATO/EAPC Countries, p.77

⁷⁶⁸ International CEP Handbook 2009, Civil Emergency Planning in the NATO/EAPC Countries, p.77

⁷⁶⁹ ANVIL Project Country Study: Estonia, p.9

⁷⁷⁰ Ibid p.13

communication systems and coordination to the local government agencies dealing with emergency management.⁷⁷¹

Following the Fukushima nuclear accident and in concert with changes in legislative framework, Estonia has revised its Emergency Preparedness and Response procedures. Further:

Estonia is a State that has no nuclear facilities under the definition given in Convention. There are no plans to build an NPP in Estonia at present time. After the Fukushima accident, the focus of Estonia in nuclear safety is primarily related to the safety of nuclear installations in the neighbouring countries and to the implications that accidents at such installations, should they occur, may have on the health of the population and on the environment. There is a number of NPPs in neighbouring countries close to Estonian borders – the closest one is approximately 70 km away. Therefore, it is of utmost importance for Estonia to fulfil its obligations according to the Article 16, to "take the appropriate steps for the preparation and testing of emergency plans for their territory that cover the activities to be carried out in the event of such an emergency".⁷⁷²

1.2.1 Strategy scope and focus

The Estonian crisis management system is based on measures that need to be taken for the protection of the population, property and the environment during civil emergencies. The aims of crisis management system are:

- To define possible emergency situations by risk analyses;
- To define prevention and mitigation measures for emergency situations;
- To develop crisis management plans;
- To prepare crisis management structures;
- To guarantee mitigation resources;
- To deal with emergency situations;
- To organise the management of public information and early warning;
- To organise emergency management training courses;
- To restore critical infrastructure services.⁷⁷³

During the last decade Estonia had several significant crises affecting the civil security system. These include the flooding of the Northern Baltic Sea following the 2005 storm, the Copterline transportation accident in 2005 and the cyber-attacks in 2007. These cases revealed some requirements to improve the Estonian crisis management system, including situational awareness and rapid response mechanisms. Following inquiries made at political level there have been improvements in operational, tactical and strategic perspective in the civil security system.⁷⁷⁴

⁷⁷¹ Ibid., p.10

⁷⁷² Estonian National Report on lessons learned and actions taken in response to the Fukushima Daiichi nuclear accident, p.3-5

⁷⁷³ International CEP Handbook 2009, Civil Emergency Planning in the NATO/EAPC Countries, p.76

⁷⁷⁴ ANVIL Project Country Study: Estonia, p.24

According to data from prevention web, the overall risk of natural hazards or crises in Estonia is relatively low.⁷⁷⁵ The different policies and measures provided by the state authorities for prevention, preparedness, response and recovery in crisis situation, are taken to ensure that the Estonian crisis management system is well prepared and equipped.

In addition, the 2014 Security Policy document of the Ministry of Interior reveals that Estonia has built upon previous years to achieve better life-saving capabilities, decrease in crime, increased number of volunteers and community involvement, improved fire and traffic safety and faster response of the emergency response teams.⁷⁷⁶

To a great extend people feel safe in Estonia. More than 95% of the residents of Estonia consider the Rescue Board to be a highly trustworthy organisation.⁷⁷⁷

Another conceptual document concerning crisis management is the Strategy of the Estonian Rescue Board 2015-2025. It plans the Board's activities in a ten year timeframe. The Strategy has been developed in accordance with the foundations of safety policies, development plans and other governmental planning documents. The document stresses on the importance on the changes in the operating environment of the Board, the impact of the globalisation processes and advanced technologies, the social economic environment. In addition, it sets out objectives which target fewer fatalities caused by fires and drowning, decline in number of rescue events and operations and property damage.⁷⁷⁸

1.2.2 Monitoring and analytical support to policy making; R&D

The Estonian Academy of Security Sciences develops activities of Internal Security and Law Enforcement related subjects including rescue and crisis management. The Research and Development activities of the Academy include innovative learning technologies such as Virtual Training Exercises as tools for joint instruction and evaluation of crisis management command and control both on operational and strategic level. New training methods, such as the above mentioned systems, play an important role in the development and training of prepared crisis management specialists. The Academy has a leading role as centre of excellence of Internal Security in Estonia and has participated in many valuable research and development projects with EU Agencies, such as CEPOL and FRONTEX, as well as networks and European-wide cooperation bodies, such as EFSCA, EURASHE, NISPAcee, The Baltic University Network and others.⁷⁷⁹

An important annual event is the International Internal Security and Law Enforcement Conference, held every year in the month of November in Tallinn. The seminar gathers high-level international

⁷⁷⁵ <http://www.preventionweb.net/countries/est/data/>

⁷⁷⁶ Ministry of Interior, Security Policy 2014, p. 2-4

⁷⁷⁷ Strategy of the Estonian Rescue Board 2015-2025, p.11

⁷⁷⁸ Strategy of the Estonian Rescue Board, p.23-26

⁷⁷⁹ <http://www.sisekaitse.ee/eass/index.php?id=14084&highlight=crisis,management>, last accessed 18.09.2014

scientists and security experts that exchange ideas and discuss innovative views of current developments and future trends on societal security affairs.⁷⁸⁰

A research and development asset that contributes to crisis management activities is developed under the supervision of the Estonian Information System Authority and is named the Virtual Situation Room (VSR). VSR has been created as a platform for crisis prevention which enables efficient cooperation between service providers, government agencies and also between service providers themselves. The VSR communication platform allows sharing of situational data between government agencies responsible for detecting, managing and preventing crises and companies providing vital services. The VSR also provides platform for analysis and visualisation of data, providing training using actual and simulated events, and for improving crisis management communication, decisions and procedures.⁷⁸¹

The modernisation and adoption of new technologies to improve the effectiveness for prevention and rescue efforts is foreseen in the Strategy of the Estonian Rescue Board. This process includes training and practice processes, adoption of e-solutions for prevention efforts and introduction of contemporary fire safety related technological solutions to the population.⁷⁸²

1.2.3 Policy for Prevention

Estonia's security policy is aimed at preventing threats as well as responding to them in a swift and flexible manner. Estonia's security is ensured through co-ordinated foreign and domestic policy measures.⁷⁸³

In the Emergency Act it is stated that crisis management committees shall be formed in counties in order to organise preventive and preparatory work in the field of crisis management and to respond to emergencies. Coordination and cooperation between civil protection and disaster prevention are provided by the Estonian Rescue Board.⁷⁸⁴

According to the Rescue Act, the Rescue Board's functions for prevention are immediately applied, unavoidable and urgent activities upon the occurrence of a rescue event, countering and eliminating a threat and alleviating the effects of that event.⁷⁸⁵

The Estonian Rescue Board conducts risk mapping, develops and enhances holistic disaster prevention and maintains preparedness. The Board also has the responsibility to review and implement the national crisis-management systems at the local level.

⁷⁸⁰ <http://www.sisekaitse.ee/eass/index.php?id=14084&highlight=crisis,management>, last accessed 18.09.2014

⁷⁸¹ <https://www.ria.ee/vsr/>, last accessed 18.09.2014

⁷⁸² Strategy of the Estonian Rescue Board 2015-2025, p.38

⁷⁸³ National Security Concept of Estonia, Unofficial translation, p.4

⁷⁸⁴ http://ec.europa.eu/echo/files/civil_protection/vademecum/ee/2-ee-3.html, last accessed 18.09.2014

⁷⁸⁵ Rescue Act, Chapter II, art.5 (4)

The prevention efforts of the Rescue Board have resulted in decrease in number of accidents due to work done on prevention. In order to improve the quality of rescue service operations the Estonian Rescue Board has acknowledged the need for involving new technologies that would make it possible to reduce both the response time of reaching affected people and the damage caused by accidents. Volunteer rescue brigades continue to gain strength in Estonia as well, and their increased involvement in not only rescue operations but also prevention efforts is an important asset.⁷⁸⁶

The Estonian Information System's Authority (EISA) is part of the administrative area of the Ministry of Economic Affairs and Communications, responsible for large-scale cyber incident, maintains and updates an emergency handling plan.⁷⁸⁷

Additionally, Estonia applies measures for preventing the spread of environmentally hazardous substances, and the neutralisation of sources of pollution on land and sea. In terms of prevention of marine pollution, the country is developing vessel traffic regulation and surveillance systems in the Baltic Sea. Remote surveillance of marine pollution is being developed, including air surveillance aimed at the early detection of pollution and the identification of the origin of the pollution.⁷⁸⁸

With regard to forest fires, the emergency measures for mitigating the consequences are established in the Fire Safety Act and include spatial planning, specific prerequisites for forest fires or landscape protection, as well instructions to the vital service providers and the public.

1.2.4 Policy for Preparedness

Forest fire is considered as one of the most hazardous threats in the Estonian landscape that require national preparedness and prevention measures. The Ministry of the Interior has established an emergency plan, which provides comprehensive directions for emergency management related to forest fire. The plan anticipates the participation in the management of emergencies of the Rescue Board and the Police and Border Protection Service, primarily for protection of public order, evacuation, traffic management, monitoring of flights; the Environment Agency for consulting and environmental assessment; the Environmental Inspectorate for consulting and environmental assessment; the Environmental Research Centre for conducting an air quality assessment; various health care providers, local governments responsible for evacuation and critical service providers.

Consideration of the risks involved in the planning stages is needed in order to raise the awareness of the local authorities through development of education and training programmes for local government officials.

In order to be prepared for reacting in emergency situations Estonia organises training exercises involving cooperation of all key sectors – civil, local governments, state authorities, business and non-profit entities. Rescue workers for crisis situations are trained and prepared by an emergency

⁷⁸⁶ Strategy of the Estonian Rescue Board 2015-2025, p.16

⁷⁸⁷ <https://www.mkm.ee/en/ministry-contact/crisis-regulation>, last accessed 18.09.2014

⁷⁸⁸ National Security Concept 2010, p.19

readiness and rescue training system, which includes: the Rescue College of the Public Service Academy – specialised in preparation of college-educated specialists for Rescue Service, and the Estonian Rescue School of the Public Service Academy in Väike-Maarja – specialised in preparation and training of fire fighters and rescuers.

1.2.5 Policy for Response

The policies and procedures for response in emergency situation are defined by the Emergency Act of Estonia. The Act also regulates the declaration of, the response to and the termination of an emergency situation.⁷⁸⁹

The Government, upon declaring the emergency situation, has to appoint a minister to direct and coordinate the response to the emergency due to which emergency situation was declared.⁷⁹⁰

The crisis management committee of the Government of the Republic of Estonia has to assist the agencies responding to emergencies in the organisation of exchange of information and the coordination of the response to the emergency. It also has to assist the emergency situation response coordinator in the coordination of the response to the emergency due to which the emergency situation was declared and if required to perform other duties assigned by the emergency situation response coordinator. The crisis management committee makes proposals to the Government of the Republic and to the emergency situation response coordinator for the implementation of measures established in legal acts.

The emergency situation response coordinator has the right to issue orders for responding to the emergency to the coordinator of emergency situation work and the state and local government agencies appointed by the Government. The orders are given in the form of administrative acts.⁷⁹¹

The Rescue Board ensures preparedness and readiness for tackling forest fires through special rescue capabilities and management of the involvement of volunteers. In case of large-scale forest fire Estonia has signed mutual assistance agreements with Finland, Sweden and Latvia for cooperation.

Furthermore, in such scenario, the international assistance could be sought through the NATO EADRCC and the European Union's Civil Protection Mechanism.

The Estonian Rescue Board is responsible for ensuring a response to an emergency on the basis of the Emergency Act. The emergency response functions of the Emergency Response Centre include receipt and processing of an emergency call to the emergency 112 phone number or a notification received in another manner and an order to respond to the Rescue Board and a provider of emergency services.⁷⁹²

⁷⁸⁹ Emergency Act, Chapter I, art.1

⁷⁹⁰ Emergency Act, Chapter III, art.18 (1)

⁷⁹¹ Emergency Act, Chapter III, art.18 (2)

⁷⁹² Rescue Act, Chapter 2, art. 5. 9 (1)

The vision of the Estonian Rescue Board is to reach the level achieved by the Finland, Sweden, Denmark, Norway and Iceland by the year 2025, in terms of the level of rescue-related safety and in terms of the number of accidents and extent of consequences.⁷⁹³

The key steps for response to emergencies encompass immediate notification to the emergency 112 helpline, followed by an immediate reaction by the relevant agencies or legal persons for notifying the Ministry of Interior. The next step for response in a crisis situation is to warn the public of the impending risk of the occurrence of an emergency that threatens the public and may endanger human lives and health or cause major infrastructural damage. The government of Estonia or the relevant crisis management authorities may use the media for informing for an emergency situation.⁷⁹⁴

In 2005 major storm the Estonian Government enforced the media to inform people in timely manner and without interpreting the government announcement. A website was created where all the government announcements, warnings and other information were stored. The Governmental Crisis Management Committee and local crisis management committees were set up in the towns of Pärnu and Haapsalu. The data from the storm was analysed, proposals regarding the compensation of the damages were drafted and sent to the Government.⁷⁹⁵

The experience from the 2005 flooding contributed to the development of a more systemic response, planning and streamlined crisis management in Estonia. It also enhanced the communication between the crisis management actors and improved the cross-border cooperation and information exchange between agencies in Estonia and Finland.⁷⁹⁶

1.2.6 Policy for Relief and Recovery

The Estonian Disaster Relief Team

The Estonian Disaster Relief Team (EDRT) is a rescue unit that provides international cooperation and can operationally take part in international rescue actions as well as to react to emergencies in Estonia. Since its establishment in 1996 the EDRT has participated in more than 20 international training exercises and missions in Indonesia, Pakistan and Latvia. The EDRT consists of five teams: search and rescue team; medical team; chemical team; support team and a group of experts.⁷⁹⁷

The Defence forces

When conducting disaster relief, responding to natural or technological catastrophe, conducting search and rescue operations, or when mitigating extensive pollution to the environment, the Defence Forces could be employed without announcing the emergency situation or state of emergency. The Defence Forces, with the support of the Defence League (see p.34), are the primary

⁷⁹³ Strategy of the Estonian Rescue Board 2015-2025, p.21

⁷⁹⁴ Emergency Act, Chapter III, art.10

⁷⁹⁵ Are Kont, Jaak Jaagus, Kaarel Orviku, Valdeko Palginõmm, Urve Ratas, Reimo Ravis, Ülo Suursaar, Hannes Tõnisson, *The 9 January 2005 storm impact on the Estonian coastal area*, p.54

⁷⁹⁶ ANVIL Project Country Study: Estonia, p.14

⁷⁹⁷ ANVIL Project Country Study: Estonia, p.19

supporter of the civilian authorities in ensuring domestic security in case of crisis. Acknowledging that the Ministry of the Interior has the overall responsibility for ensuring domestic security and crisis management, the Defence Forces are employed to settle civil emergencies in cases where all the other crisis management capabilities of the state have been exhausted or the required capabilities are only available to the Defence Forces. The use of the Defence Forces for ensuring domestic security is only possible by a decree from the Government of the Republic.⁷⁹⁸

The crisis management structures within the area of governance of the Ministry of Defence are ready to support the civilian structure in compliance with the crisis management plans that are developed by the Ministry of the Interior and approved by the Government.

1.3 Financing

1.3.1 Investing in preparedness

Investing in emergency preparedness is one of the most important factors when it comes to crisis management. The planning of financial resources needed to implement the objectives of the national strategy will be in accordance with the planning of the state budget. Due to the objectives, particular attention will be paid on increased funding of volunteers, proportion of investments and increased wages. The Civil protection expenditures, according to data of the European Commission, are approximately 0.6% of the GDP of Estonia.⁷⁹⁹

The Strategy of the Estonian Rescue Board 2015-2025 foresees increase in financing for the available technology and equipment with an appropriate service life and safety requirement. Investments currently account for 2.8% of the Rescue Board's budget. The Strategy also expects increase in the average salary of Rescue Board employees in order to match the average salary in the public administration and national defence sectors.⁸⁰⁰

In accordance with the trends in volunteer rescue, it is planned to increase the amount invested in the competence of volunteer rescuers to 1.5 million euros by the year 2016.⁸⁰¹ Moreover, state financial support for volunteers has increased significantly in recent years, reaching 938,874 in 2013 and 1,146,748 euros in 2014.⁸⁰²

Contributing factor for the decreasing number of fatalities caused by fires and drowning is the increased budget for prevention work. In 2014, Estonia allocated over 700,000 euros.⁸⁰³

⁷⁹⁸ Estonian National Defence handbook 2010, p.43

⁷⁹⁹ EC, Vademecum, Country profiles - Estonia – prevention & preparedness, last accessed 18.09.2014

⁸⁰⁰ Strategy of the Estonian Rescue Board 2015-2025, p.34

⁸⁰¹ Strategy of the Estonian Rescue Board 2015-2025, p.34

⁸⁰² Strategy of the Estonian Rescue Board 2015-2025, p.40

⁸⁰³ Ministry of Interior, Security Policy 2014, p.9-11

Additionally, Estonia has signed framework agreements with the Swiss Agency for Development and Cooperation (SDC) for the implementation of two projects related to emergency preparedness. The first one was for prevention and management of natural disasters worth around 1,3 million euros. The project lasted over two years and resulted in improved fire safety of the Estonian social and health service institutions, decrease of the potential fire sources in these institutions and improving the preparedness among the staff to react in danger situations.⁸⁰⁴

The second similar project was for strengthening information and communication technology systems of the Emergency Respond Centre and the grant was estimated at almost 1,67 million euros. This project lasted for three years and resulted in improvement of the time needed for responding and processing emergency calls and sending rescue vehicles. The projects will also aid the establishment of an emergency management monitoring system onto an electronic map, which will enable to display information regarding the location of the emergency caller and the location of the available rescue vehicles.⁸⁰⁵

Estonia has developed good collaboration with the private sector, as the Estonian civil security authorities are looking at solutions for improving and upgrading their data exchange and operational efficiency. Many private entities actively take part in the EU funded projects and programmes in civil security domain.⁸⁰⁶

1.3.2 Investing in consequence management

The Government by regulation establishes the bases and procedures for financing the response to the emergency due to which emergency situation was declared.⁸⁰⁷

The January 2005 “Gundun” severe winter storm that struck Estonia and the Baltic Sea area could provide an example for understanding the processes related to investing and allocating funding for consequence management.

The damages were estimated at 48 million euros, of which 28,2 million were attributed to the private sector and 19,6 million euros to the public sector. Following the storm, the EU Solidarity Fund granted Estonia 1.3 million euros for mitigation and recovery. The rapid activation of the EU Solidarity fund aided the restoration of power lines and communications systems which was completed within few days after the storm. Any further postponement would have resulted in much higher costs.⁸⁰⁸

⁸⁰⁴ <http://www.fin.ee/prevention-and-management-of-natural-disasters-increasing-fire-safety-in-social-and-health-service-institutions/?highlight=crisis,management>, last accessed 12.09.2014

⁸⁰⁵ http://www.fin.ee/pe3_ last accessed 13.09.2014

⁸⁰⁶ ANVIL Project Country Study: Estonia, p.24

⁸⁰⁷ Emergency Act, Chapter III, art.20

⁸⁰⁸ Are Kont, Jaak Jaagus, Kaarel Orviku, Valdeko Palginõmm, Urve Ratas, Reimo Rivis, Ülo Suursaar, Hannes Tõnisson, *The 9 January 2005 storm impact on the Estonian coastal area*, p.54

At national level, the Government allocated more than 1,4 million euros compensation in support to the most deeply affected people, with low income to purchase basic goods, and for support of immediate repair works.

At local level, dry firewood, pumps for watering out the flooded houses and organising cleaning of the dirt left by the storm were allocated by that the local administration allocated in the aftermath of the storm. Pärnu City Government has covered the expenses of its citizens with low income for heating, roof restoration and electricity. The total amount allocated for 208 families is about half a million euros.

At international level, the Red Cross, UNICEF and Norway (Buskerud County) all allocated funds in support of the affected population.

The insurance companies have compensated damages caused by the storm amounting to 11.7 million euros.⁸⁰⁹

The 2005 storm was the biggest natural disaster to hit Estonia since its independence in 1991. The data provided above reveals that the main responsibility for covering the costs of such crisis lies with the Estonian government, local government authorities and insurance companies. Depending on the scale of the damages inflicted, there are other actors that allocate funds and efforts for mitigation.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

This information could not be obtained within the given timeframe.

1.4.2 Departmental Lessons Learned systems

The Crisis Management Bureau of the Ministry of the Interior conducted an analysis following the emergency situation caused by the 2005 storm, based on the information received from the counties and ministries.⁸¹⁰

The report analysed the actions of the different state offices that reacted during the storm as well as the description of the problems that became evident as a result. The analysis also presented proposals for improving preparedness in emergency situations and preventive measures that need to be implemented in order to avoid difficulties in similar situations in the future.

⁸⁰⁹ Ibid., p.51

⁸¹⁰ <https://www.siseministeerium.ee/13310/?highlight=emergency,act>, last accessed 18.09.2014

Following the events in 2005, it was analysed that there is a need for informing the people about anticipating risks in case of natural hazard or other extreme situations, the information exchange between the relevant institutions needs to be improved and the operational radio communication between the institutions subordinated to the Ministry of Interior should be developed.

The Prime Minister tasked the Minister of Finance to set up a Committee for assessing the damages with the Secretary General of the Ministry of Finance acting as Chairman. The members include secretary-generals of involved ministries and county governors of the three most affected counties.⁸¹¹

The Committee assessment document noted and recommended measures that include updating the crisis plans of several ministries and counties and improvement in the information service and better communication between the authorities. Additional highlighted measures were the need of improved forecast and prognoses of the water level rise velocity and enhanced cooperation between neighbouring countries.

1.4.3 Centralised (national) Lessons Learned system

In Estonia there is no specific lessons learned system or framework outside of the competence of the Ministry of Interior and the local/regional authorities.

During one of the crisis events of 2010 - snow storm Monika, which hit Estonia at the beginning of December - the rescue crews were required in various places in northern and central Estonia where nearly 200 vehicles with total of 600 people were trapped in snow. In less than 24 hours the rescue teams managed to conduct an operation and 177 people were evacuated from the trapped vehicles. Despite conducting a successful operation in very inhospitable weather conditions, the rescue team required more available capabilities, more particularly, modern off-road rescue vehicles. Improved crisis communication between the involved actors is another identified shortfall from the operation.⁸¹²

In 2010, with the support of the European Fund for Regional Development, the Rescue Board acquired specialised technology and equipment for responding to various types of rescue events. This allowed the Board to considerably improve the efficiency of responding to chemical accidents, oil pollution capture works, and the logistical support and management of large scale rescue works.

Moreover, the capability of responding to floods was improved by the joint programme of the Baltic States, or also known as the BaltFloodCombat. The joint Baltic unit participated in two foreign missions in 2010, eliminating the consequences of floods in Poland and Moldova.

⁸¹¹ Are Kont, Jaak Jaagus, Kaarel Orviku, Valdeko Palginõmm, Urve Ratas, Reimo Ravis, Ülo Suursaar, Hannes Tõnisson, *The 9 January 2005 storm impact on the Estonian coastal area*, p.53

⁸¹² Security Policy 2011, p.57

1.4.4 International exchange for Lessons Learned

Estonia evaluates and exchanges lessons learned in the field of crisis management through collaboration in various cross-border and international exercises and activities. See point 3.2 for more information regarding cross-border cooperation.

1.4.5 Regular policy reviews

The Estonian Rescue Board has the responsibility to review and implement the national crisis management systems at local level. The Board supports the local government agencies with regard to communication systems and coordination, as well as provides comprehensive training for preparedness, response and consequence management where it is deemed necessary.⁸¹³

At regional level, County Governors are responsible for the review of the risk analysis of an emergency of a certain region. At local level, the head of the local government crisis management committee is the rural municipality mayor or the city mayor, who is responsible for reviewing emergency policies and risk assessments of a certain region.⁸¹⁴

The same procedures apply for local and rural municipalities or cities, where the crisis management committee is the main responsible entity. The crisis management plans are reviewed not less frequently than once a year and are submitted to the county governor.

Following the Fukushima nuclear accident and in concert with changes in legislative framework, Estonia has revised its Emergency Preparedness and Response procedures with special attention to communication between the authorities and to the public. In order to assess the capabilities and the preparedness of Estonia to respond to nuclear or radiological emergency, the country hosted the Emergency Preparedness Review Mission of the International Atomic Energy Agency in 2011.⁸¹⁵

1.5 Resilience

Resilience concepts are namely developed for critical infrastructures such as the supply of basic services like water, food, energy, transport, housing, communications, etc.

Resilience concepts need also to take into account the necessity to anticipate, to plan and to implement in the crises time a substitution process aiming to deal with a lack of material, technical or human resources or capacities necessary to assume the continuity of basic

⁸¹³ ANVIL Project Country Study: Estonia, p.10

⁸¹⁴ http://ec.europa.eu/echo/files/civil_protection/vademecum/index.html, last accessed 17.09.2014

⁸¹⁵ Estonian National Report on lessons learned and actions taken in response to the Fukushima Daiichi nuclear accident, p.5

functions and services until recovery from negative effects and until return to the nominal position.⁸¹⁶

The resilience capability of Estonia to prevent and avert security threats depends on the readiness to maintain critical services. In promoting and enhancing resilience concepts, the state cooperates and involves other members of civil society, thus improving social cohesion and social risks are prevented. The prevention of social risks is addressed in the national economic and social policy.⁸¹⁷

In order to ensure the resilience of critical services, Estonia develops operational capability to recover interrupted services, provides sufficient reserves and action plans. Continuous evaluation and monitoring of risks that may disrupt or cause malfunction in critical services is conducted.⁸¹⁸

Moreover, to safeguard the state's resilience, a plan for organising the functioning of national command and control and guaranteeing continuity of government in the event of risk situation and crises shall be drafted under the co-ordination of the Ministry of Defence.⁸¹⁹ The Rescue Board also develops emergency plans in support of maintaining the resilience of the country.

Besides the National Security Concept of Estonia and the National Defence Strategy the resilience concept is not frequently used in other policy or legislative documents, nor in academic research in the disaster management domain.

1.6 Information sharing and data protection

According to the Rescue Act disclosure of personal data is permitted only in such case and to such an extent it is unavoidably necessary for the notification of a threat or a rescue event. In order to perform its functions the Rescue Board or other rescue authority may process personal data on the bases of and pursuant to the procedure provided for in the Personal Data Protection Act.⁸²⁰

Since the unprecedented cyber-attacks in 2007, Estonia unequivocally acknowledged the need to protect information systems and data. The coordinated cyber-attacks against the Estonian government, banks, media and telecommunications companies demonstrated vulnerability of the information systems as one of the important aspects of national security.⁸²¹

The 2008-2013 Cyber Security Strategy of Estonia was developed by experts from various ministries and agencies. The document recommended the development of a national legal framework for cyber security concerning areas which are either not covered or are insufficiently covered by the existing legislation.

⁸¹⁶ <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1072-drs-07-2014.html>, last accessed 15.09.2014

⁸¹⁷ National Security Concept of Estonia, Unofficial translation, p.17

⁸¹⁸ National Security Concept of Estonia, Unofficial translation, p.17

⁸¹⁹ National Defence Strategy, Ministry of Defence, p.26

⁸²⁰ Rescue Act, Chapter 4, 14 (2)

⁸²¹ Cyber Security Strategy of Estonia 2008-2013, p.6

The analysis showed that Estonia's current legal policy for IT is decentralised and, in fact, partly contradictory. For instance, Estonia has adopted a liberal policy concerning the use of e-services and the information society generally; at the same time, the policy for personal data protection is rather conservative and the regulation of information society services complies only with the EU's minimum requirements.⁸²²

Furthermore, the Strategy emphasizes on the importance of the establishment a clear legal basis for processing any kind of personal data. The Personal Data Protection Act aims at fulfilling this as it provides general organisational, technical and physical security measures to ensure the availability, integrity and confidentiality of data.

However, it is necessary to point out that for national security reasons exceptions to the Personal Data Protection Act should be made, as EU Directive 95/46/EC on the protection of personal data and the Council of Europe Convention ETS 108 allows. The Cyber Security Strategy of Estonia recommends that these exceptions could be formed by amending the Personal Data Protection Act or through a separate regulation addressing the protection of the critical infrastructure.⁸²³

The rescue information system

According to the Rescue Act, the Ministry of the Interior shall establish a database for the collection of data related to operations and proceedings related to the functions of the Rescue Board for the efficient and speedy performance of the functions of a rescue service agency and for the performance of efficient supervision. The official name of the database is *rescue information system* and its chief processor is the Rescue Board.⁸²⁴

The MAppERS project

Estonia participates in the Mobile Application for emergency Response and Support (MAppERS) project. It is funded by the European Commission and it is aimed at identifying gaps in the information sharing system in terms of territorial knowledge, risk prevention and emergency.

Further, the application deals with human role as "crowd sourced mappers" through the development of a smart phone application that allows sharing of precise, GPS-localised information regarding the location of risk situations from the population to civil protection operators in a contest of geospatial response. The implementation of the project implies the design and testing of a smartphone application for volunteers and for citizens to be used as a communication device between citizens, volunteers and headquarters during phases of emergency.⁸²⁵

⁸²² Ibid., p.18

⁸²³ Cyber Security Strategy of Estonia 2008-2013, p.19-20

⁸²⁴ Rescue Act, Chapter III, art. 9.(1)

⁸²⁵ <http://ec.europa.eu/echo/node/2628>, last accessed 10.09.2014

The expected results of the project, with its completion scheduled for the end of 2015, include creation of a collaborative user environment for emergency response and support during crisis, raising public awareness and easy-to-use data for crisis management.⁸²⁶

⁸²⁶ MAppERS kick off meeting - Preparedness & Prevention 2013 Call, PowerPoint Presentation by Simone Frigerio

2 Legislation

The 2013 Anvil Country Study describes the legal statute of the Estonian civil security system as:

fragmented and rests upon formal distinct bodies of formal legislation at the state and regional levels. From the functional perspective, the statutory basis is divided into laws for different emergency response services, sector specific regulations, and provisions for a formal state of emergency and for other kinds of disasters and crises. The Estonian civil security is a mixture of one level or institution coordination and, on the other, a combination of versatile vertical and horizontal control and command lines. A bottom line principle is to support the local decision-making process as much as possible.⁸²⁷

The main regulative framework for civil protection and emergencies is defined by the Emergency Act and the Rescue Act of Estonia.

The Emergency Act, in force since June 2009, provides the legal basis for crisis management, preparation of and responding to emergencies. It regulates the use of the Defense Forces and the National Defense League in responding to emergency situations and rescue operations.⁸²⁸ It also defines the mechanisms to be activated in case of large scale natural or man-made disasters. The Emergency Act lists 42 vital services which are provided by public sector agencies, and imposes duties on authorities to maintain the sustainability of vital services as well as on service providers to provide vital services.⁸²⁹ For example, The Ministry of Economic Affairs and Communications shall organise the continuous operation of vital services such as functioning of electricity and gas supply. The Ministry of the Environment shall organise the functioning of air surveillance and early warning; and functioning of hydrological and meteorological monitoring and early warning.⁸³⁰

The Rescue Act provides the functions, organisation and rights of a rescue service agency and the rights and obligations of voluntarily participating persons in the activity of a rescue service agency. The specifications of the organisation of the rescue service agency activities are provided by the State of Emergency Act.⁸³¹ This Act provides the basis, conditions and procedure for declaration of a state of emergency, and the competence of authorities managing a state of emergency; and the measures to be implemented during a state of emergency, and the rights, duties and liability of persons during a state of emergency.⁸³²

The main civil security and emergency management actors are four territorial inter-agency emergency preparedness committees that are managed by the national rescue board.⁸³³

⁸²⁷ ANVIL Project Country Study: Estonia, p.12

⁸²⁸ Emergency Act of Estonia, Chapter I, art.1

⁸²⁹ <https://www.ria.ee/documents/>, last accessed 14.09.2014

⁸³⁰ Emergency Act of Estonia, Chapter IV, art.34

⁸³¹ Rescue Act, Chapter I, art.1

⁸³² State of Emergency Act, Chapter I, art.1

⁸³³ ANVIL Project Country Study: Estonia, p.2

The National Defence League Act establishes the legal basis and portrays the activities of the Estonian Defence League, which may include participation in resolving an emergency, in rescue work and ensuring the safety according to the procedures provided in the Emergency Act.⁸³⁴

2.1 Crisis (emergency, disaster) management concept

The National Security Concept of the Republic of Estonia is a key document that establishes the objectives, principles and directions of security policy. The National Security Concept highlights crisis management as one of the essentially important tasks.

The Concept foresees as a vital task the readiness and preparedness for crisis management. The document emphasises on the importance of preventive diplomacy and the efforts in the prevention of conflicts through exchange of information and dialogue between partners. Participation in crisis management operations of NATO and the European Union as well as in NATO Response Force and EU battle groups is also described as an integral part of Estonian security policy.⁸³⁵ Further, the concept envisages that Estonia's national security relies on the membership in NATO and European Union, as well as to close cooperation with its allies and international partners.⁸³⁶

The implementation of the strategy will be monitored and analysed on a yearly basis. An assessment will be developed regarding the progress made towards the established objectives. Following the completion of the analysis, proposals will be made to update the strategy and the related documents as appropriate.⁸³⁷

2.2 General crisis (emergency, disaster) management law

The Emergency Act is in force since June 2009 and provides the legal bases for crisis management, including preparing for and responding to emergencies. *"The Act also regulates the declaration of, the response to and the termination of emergency situations and the use of the Defence Forces and the National Defence League in responding to emergencies, performing rescue operations and ensuring security."*⁸³⁸

The Act sets out the arrangements for the organisation of the preparation for emergencies, including for emergency risk assessments and plans, crisis management exercises and the organisation of responding to emergencies.⁸³⁹

⁸³⁴ The Estonian Defence League Act

⁸³⁵ National Security Concept of Estonia, Unofficial translation, p.12

⁸³⁶ Ibid, p.4

⁸³⁷ Strategy of the Estonian Rescue Board, p.42

⁸³⁸ Emergency Act, art.1 (1)

⁸³⁹ Emergency Act, p.2-9

The Emergency Act provides the legal basis for the organisation of emergency preparedness and for crisis management by the government, government agencies and local governments. The Act defines the crisis management tasks and the duties of the responsible institutions with regard emergency preparedness.⁸⁴⁰ The tasks for crisis management require preparation of risk assessments in order to identify possible emergencies, the possibilities for avoiding them, as well as for mitigating the consequences. As other crisis management tasks listed are the preparation of crisis management plans, the organisation of crisis management training, and the build-up of the structure of units for responding to emergencies. The authorities must ensure the necessary resources for responding to emergencies, organising the informing of the population and raising public awareness on responding to an emergency.⁸⁴¹

Furthermore, the Rescue Act provides the functions, organisation and rights of a rescue service agency and the rights and obligations of persons participating voluntarily in the activity of a rescue service agency. The Rescue Act defines the rescue service agencies and their functions, as well as the participation in international rescue work and explosive ordnance disposal.⁸⁴²

2.3 Emergency rule

The State of Emergency Act, which entered into force on 16 February 1996, provides the basis, conditions and procedures for declaration of a state of emergency, the competence of authorities managing a state of emergency, as well as the measures to be implemented during a state of emergency, and the rights, duties and liability of persons during a state of emergency.⁸⁴³

A state of emergency is declared on the basis of the Constitution of the Republic of Estonia in case of a threat to the constitutional order of Estonia, and when it is not possible to eliminate a threat to the constitutional order of Estonia without the implementation of the measures provided of the State of Emergency Act. According to the Act, the Government can declare a state of emergency throughout the state for no longer than three months. During a state of emergency, acts and other legislation are valid unless the State of Emergency Act does not provide otherwise.⁸⁴⁴

A threat to the constitutional order of Estonia may arise from an attempt to overthrow the constitutional order of Estonia by violence; terrorist activity; collective coercion involving violence; extensive conflict between groups of persons involving violence; forceful isolation of an area of the Republic of Estonia; prolonged mass disorder involving violence.

The Act also defines that during a state of emergency *it is possible to restrict in the interest of national security and public order the following, rights and liberties of persons:*

⁸⁴⁰ Emergency Act, Chapter II

⁸⁴¹ Emergency Act, Chapter II

⁸⁴² Rescue Act, p. 1-12

⁸⁴³ State of Emergency Act, Chapter I, art.1

⁸⁴⁴ State of Emergency Act, Chapter I, art.6

1) the right to free self-realisation; 2) the right to liberty and security of person; 3) the right to freely choose domain of activity, profession and employment; 4) the right to freely participate in political parties and some types of non-profit associations; 5) the right to freely possess, use and dispose of property; 6) the right to inviolability of home; 7) the right to freedom of movement and to choice of residence; 8) the right to leave Estonia and to settle in Estonia; 9) the right to confidentiality of messages sent or received by post, telegraph, telephone or other commonly used means; 10) the right to freely access information disseminated for public use; 11) the right to access, pursuant to the procedure provided by law, information held by state authorities and local government bodies and in state and local government archives; 12) the right to freely disseminate ideas, opinions, beliefs and other information by word, print, picture or other means; 13) the right to assemble peacefully and to conduct meetings without prior permission.⁸⁴⁵

Upon declaring a state of emergency state authorities and rural municipality or city governments shall notify the President of the Republic, the Government of the Republic and the Commander of the Defence Forces of the threat to the constitutional order of Estonia that has occurred. The crisis committee, established by the government for the implementation of measures regarding the threat, develops the state policy and action plans to forecast, prevent and eliminate the threat. The committee also develops an analysis concerning the prevention and the planning of elimination of the emergency situation and presents the results to the Prime Minister.⁸⁴⁶ The Prime Minister is the head of state of emergency.

During a state of emergency, the head of state may give orders to the chief of internal defence and to heads of governmental authorities and local government bodies. Furthermore, the Prime Minister may restrict the freedom of movement partially or in the entire territory of Estonia, provide broadcasters with information relating to the state of emergency and issue other orders by authorisation of the Government of the Republic.⁸⁴⁷

The Government, upon declaring an emergency situation, has to appoint a minister to direct and co-ordinate the response to the emergency due to which emergency situation was declared.⁸⁴⁸ Estonia has not officially declared a state of emergency after its new independency in 1991.⁸⁴⁹

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The Rescue Act provides fundamentals of activity of the rescue service agency, the functions of the rescue service agency and the measures of the Rescue Board.⁸⁵⁰

⁸⁴⁵ State of Emergency Act, Chapter I, art.4

⁸⁴⁶ State of Emergency Act, Chapter I, art.8

⁸⁴⁷ State of Emergency Act, Chapter I, art.18

⁸⁴⁸ Emergency Act, Chapter III, art.18 (1)

⁸⁴⁹ ANVIL Project Country Study: Estonia, p.25

⁸⁵⁰ Rescue Act, p. 1-12

Duties of rescue service agencies and the organisation of inter-agency crisis management exercises are set out in the Emergency Act.

The leading responsibility in the field of crisis management in Estonia is held by the Ministry of Interior. The ministries and agencies are responsible in their respective areas for the following:

- Ministry of Internal Affairs - maintenance of public order, fire extinguishing and rescue work, organisation of protection of data banks;
- Ministry of Economic Affairs - functioning of the energy system, organisation of supply with staple goods;
- Ministry of Agriculture - organisation of supply with food;
- Ministry of Finance - functioning of the financial system;
- Ministry of Social Affairs - organisation of health care, social insurance and social welfare, provision of psychological and social aid, assistance to refugees and the evacuated, labour force calculation;
- Ministry of Transport and Communications - organisation of telecommunications, postal services and transport;
- Ministry of Culture - organisation of protection of cultural property;
- Ministry of the Environment - organisation of environmental protection and monitoring.⁸⁵¹

According to the Emergency act the duties of the ministries are as follows:

- to perform risk assessment in order to identify the emergencies which may occur in its area of government. Only exception is the Ministry of Defence that does not perform risk assessments;
- to prepare a crisis management plan and ensure the implementation thereof in an emergency;
- to form a structural unit in the ministry or designate one of the departments to be responsible for the general organisation of crisis management in the area of government of the ministry;
- to form a crisis management team;
- to determine the crisis management duties of agencies and inspectorates in the area of government of the ministry;
- to plan the use of resources necessary for responding to an emergency;
- to direct the responding to an emergency in its area of government;
- to organise crisis management training in its area of government;
- to perform an assessment in its area of government in order to identify the resources which are necessary for participation in international crisis management.⁸⁵²

⁸⁵¹ Emergency Act, p.2-4

⁸⁵² Emergency Act, Chapter II, art.5 (7)

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Estonians historically have a tradition of preference of the local self-government instead of strong state power.⁸⁵³ At regional level, the responsibility for civil security is shared between the fifteen county rescue services, which have since 2005 been subordinated to the national rescue board. At local level, the four regional services are the highest civil emergency planning authorities.⁸⁵⁴ (see 3.1 for organizational chart)

The Emergency Act sets out that the local rescue service agencies of the Rescue Board have to form permanent regional crisis management committees to operate in their respective regions. The main responsibilities of this regional committee include monitoring and analysing the crisis management system, including the preparation for emergencies, responding to emergencies and ensuring the continuous operation of vital services in the region; analysing the probability of the occurrence of emergencies and making proposals to the government crisis management committee and the respective competent agencies; reviewing the part of the emergency risk assessment concerning the area of activity of the crisis management committee; assisting the emergency situation response coordinator in the coordination of the response to the emergency; assisting agencies responding to emergencies with regional effect in the organisation of exchange of information and the coordination of the response to the emergency.

Additionally, the regional crisis management committees are responsible for the organisation of regional crisis management exercises; for informing the public of the emergency and forming a territorial crisis management committee. The head of the local rescue service agency is the chairman of the regional crisis management committee.⁸⁵⁵

The rural municipality or city government establishes the statutes and approves the staff of the crisis management committee of the local government. The draft statutes and the staff of the crisis management committee have to be agreed with the local rescue service of the Rescue Board.⁸⁵⁶ The Minister of the Interior shall establish the statutes and approve the staff of the regional crisis management committee.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Chapter 7 of the Rescue Act provides the basis for the participation of volunteers in the activities of the relevant rescue service agency. Further, rescue service agency may enter into civil law contracts with legal persons for organising the activity of volunteer rescuers participating in rescue work and prevention work. The Act provides definition of volunteer rescuer, the procedures for acceptance,

⁸⁵³ ANVIL Project Country Study: Estonia, p.11

⁸⁵⁴ Ibid., p.3

⁸⁵⁵ Emergency Act, Chapter I, art.4

⁸⁵⁶ Emergency Act, Chapter I, art.5

training and participation in prevention work, social benefits and guarantees, the work organisation and other related provisions.⁸⁵⁷

The Estonian crisis management legislation emphasises on the role of the private sector at all levels of preparedness but not so much at the level of response. The role of non-profit relief organisations is limited because after the independence of Estonia in 1991 the sector has not yet fully developed. However, the existing non-profit organisations are included in all public crisis management structures and major exercises.

According to the contingency plans, the most important non-profit and volunteer organisations in Estonia are the Red Cross, the Estonian Volunteer Fire-Fighters Union, the Estonian Association of Fire and Rescue Chiefs, and the Estonian Life Saving Association and Defence League, who have also been given the task of assisting in rescue work.⁸⁵⁸

In 2013 the “National development trends in volunteer rescue work 2013-2016” document was issued. The document’s main aim is to develop a nationwide volunteer rescue network that brings together different people from the society with trained professionals.

There are also several national support organisations created by citizens or private entrepreneurs. These include the Defence Involvement Fund, the Estonian Injured Veterans Association, the Estonian Border Guard Officers Union, and the Estonian Reserve Officers Union.⁸⁵⁹

The Estonian Red Cross is certified by the Ministry of Education and Research (renewed in 2010) to provide the courses to the population. In 2013 alone the Estonian Red Cross has provided 459 courses for 6234 persons and 138 trainers have been prepared by the organization.⁸⁶⁰

2.7 Legal regulations for international engagements of first responders and crisis managers

Participation in international rescue work and explosive ordnance disposal outside the territory of the Estonia takes place on the basis of a request for help submitted under an international rescue agreement or by a Member State of the European Union or on the basis of the Participation in International Civil Missions Act.⁸⁶¹

The procedure for sending a team to perform rescue work and explosive ordnance disposal is established by the Estonian government by a regulation. Under an international agreement the Rescue Board may involve an administrative authority of another country in rescue work on the

⁸⁵⁷ Rescue Act, Chapter 7, art.37

⁸⁵⁸ ANVIL Project Country Study: Estonia, p.23

⁸⁵⁹ ANVIL Project Country Study: Estonia, p.20

⁸⁶⁰ <http://www.redcross.ee/en/activities.html>

⁸⁶¹ Rescue Act, Chapter 6, art.31

territory of Estonia. The Estonian Rescue Board may be involved in rescue work on the territory of another country, the procedures for which is regulated according to the international agreement.⁸⁶²

The purpose of the International Civil Missions Act, entered into force in April 2011, is to organise the system of participation in civil missions and to create a clear legal basis therefor. It also solves issues regarding salary, insurance and training of experts. The Act provides the possibility to also send experts employed in the private sector and freelance experts on a mission. The expenses related to preparation and participation in missions is covered from the state budget, usually from the funds allocated to the Ministry of Foreign Affairs or the Rescue Board. Furthermore, the Act defines the area of responsibility in the preparation and participation in mission.⁸⁶³

Internationally, a Framework Agreement between Estonia and Latvia for mutual assistance in the event of natural or technological disasters. Moreover, the Estonian Rescue Board and the Republic of Latvia have signed a national fire and rescue cooperation agreement. Estonia also has signed an agreement with the Government of the Kingdom of Sweden for emergency prevention, preparedness and consequence management. Additionally, agreement with Finland for maritime and aeronautical search and rescue has been signed. Please see 3.2 for more information related to international cooperation and agreements.

⁸⁶² Rescue Act, Chapter 6

⁸⁶³ <http://www.riigikogu.ee/index.php?id=67130>, last accessed 19.09.2014

3 Organisation

3.1 Organisational chart

The Republic of Estonia is a parliamentary republic. The government has the executive power and the function of coordination and supervision of institutions of the executive power of the state and is comprised of the prime minister and up to 14 ministers. Administratively, Estonia is divided into 15 counties and each county is led by a county governor. Counties consist of local governments that are led by local government councils. There are 227 local governments that consist of 194 rural municipalities and 33 towns.

In Estonia the highest authority responsible for emergency and disaster management is the Ministry of Interior. It is responsible for policy formulation and its execution in the area of civil security. The Estonian Rescue Board is directly subordinate to the Ministry of Interior and has a key role in representing Estonia in various international forums such as the UN, EU and NATO and other relevant civil security organisations.

The Rescue Board also develops emergency plans, develops communication systems for the rescue services, coordinates the fire-fighting and rescue operations when necessary, develops the legal basis for civil security mechanism, drafts the general principles and rules for fire-fighting and rescue work and its applications.⁸⁶⁴

Additional national government institution under the authority of the Ministry of Internal Affairs is the Emergency Response Centre. It is responsible for processing the receipt and processing of an emergency call to the emergency 112 phone number, sending out rescue teams, ambulances, other needed technical means and rescue specialists to the place of the emergency, as well as informing the chairman of the local crisis commission of the county or the local administration in case of a crisis.⁸⁶⁵

The Estonian Rescue Board's tasks include:

- Participation in national and international development and implementation of crisis management policy;
- Providing advice to the Minister of the Interior regarding crisis management plans and risk analyses;
- Presenting proposals for the development of communications and early warning systems;
- Providing advice to local governments on crisis management matters;
- Coordinating crisis management related cooperation activities of the local governments with non-profit organisations and foundations;

⁸⁶⁴ ANVIL Project Country Study: Estonia, p.13

⁸⁶⁵ <http://www.rescue.ee/23023>, last accessed 13.09.2014

- Planning and participating in crisis management training;
- Participating in crisis management related research activities;
- Conducting and coordinating crisis management activities in the rescue field;
- Participating in national and international crisis management operations;
- To gather, analyse and transmit national and international information related to emergency situations.⁸⁶⁶

Civil protection

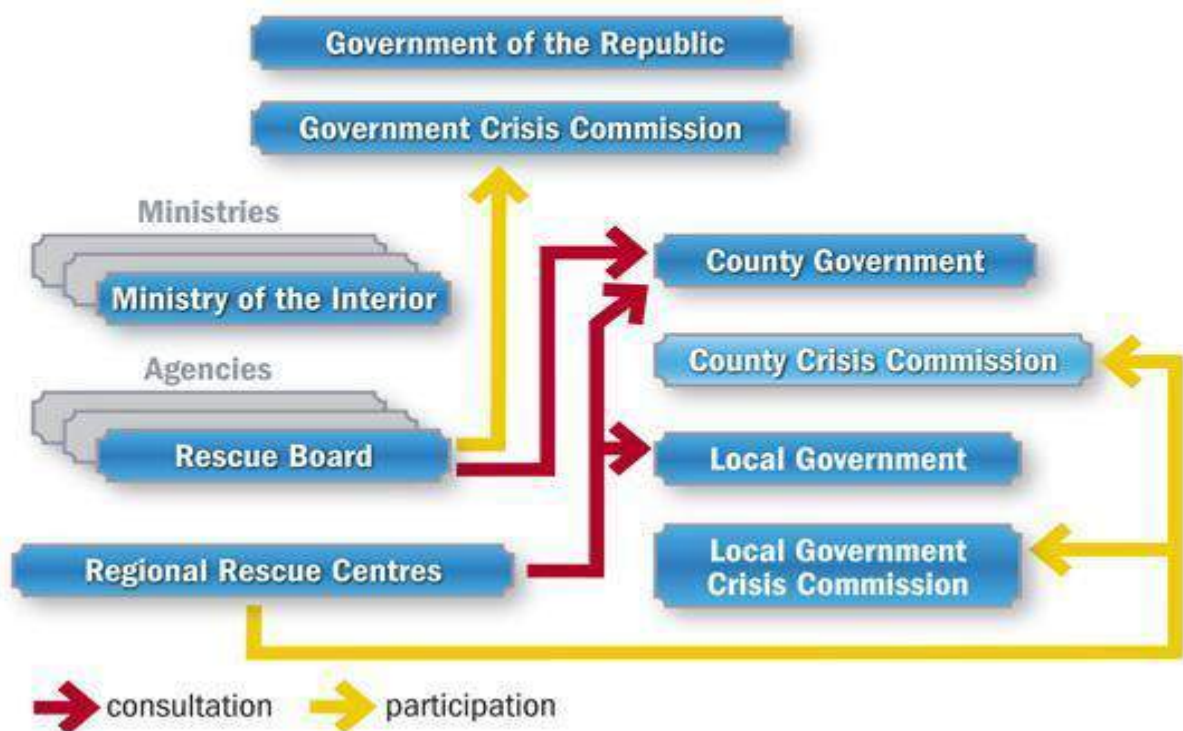


Figure 5 Organisation of Estonian Civil Protection⁸⁶⁷

⁸⁶⁶ International CEP Handbook, p.77

⁸⁶⁷ Source: Estonian Rescue Board

Organization of Estonian Rescue Services



Figure 6 Organisation of Estonian Rescue Services⁸⁶⁸

The police

The Police and Border Guard Board agency employs more than 5000 people. The main tasks of the Police and Border Guard Board are securing of the external border of the European Union and the security and public order within the state and the investigation and prevention of offences. The tasks are divided between four work areas: border guard, public order, criminal police, and citizenship and migration. The Police and Border Guard Board is a police authority and all officers, regardless of their position are police officers.

The tasks and prime objective of the Estonian Security Police are related to reducing security threats aimed at the Republic of Estonia and to maintain national security. Additionally, it has “actively cooperate with the security and law enforcement authorities of other states and with international organizations.” With regard to crisis management, one of the key tasks of the Estonian Security Police is related to the multiple fields of critical infrastructure protection.⁸⁶⁹⁸⁷⁰

The defence forces

The Defence Forces could be deployed in response of crisis or disaster, but in cases where all the other crisis management capabilities of the state have been exhausted or where the required resources or capabilities are only available to the Defence Forces. In principle, the Defence Forces and the Defence League participate in the crisis management without using military activities or weapons.⁸⁷¹

⁸⁶⁸ Source: Estonian Rescue Board

⁸⁶⁹ <http://www.politsei.ee/en/organisatsioon/>, last accessed 16.09.2014

⁸⁷⁰ ANVIL Project Country Study: Estonia, p.16

⁸⁷¹ Estonian Defence Handbook 2010 p.42-43

The Defence League has a military supportive role in case of civil emergencies and disasters. This includes also the National Cyber Defence League. The Estonian Defence League is a volunteer militarily organised national defence organisation operating under the rule of the Ministry of Defence and part of the Defence Forces.⁸⁷²

The Defence League incorporates other affiliated organisations such as Women's Home Defence, Young Eagles and Home Daughters. Altogether the number of enlisted volunteers in action is 21,000.⁸⁷³

The Department of Critical Information Infrastructure Protection at the Estonian Information System's Authority (RIA) works in the field of protection of information systems that are needed for the sustainability of vital services. The department is responsible for planning the protection for the state's critical public and private information systems on the national level. The Computer Emergency Response Team of Estonia (CERT) handles the protection of the information systems necessary for the provision of vital services.⁸⁷⁴

The most important non-profit and volunteer organisations in Estonia are regarded the Red Cross, the Estonian Volunteer Fire-Fighters Union, the Estonian Association of Fire and Rescue Chiefs, and the Estonian Life Saving Association and Defence League, who have also been given the task of assisting in rescue work.⁸⁷⁵

In Estonia the most significant non-governmental organisation is the Estonian Red Cross (ERC). Founded back in 1919 the ERC has over 3900 members including 500 active volunteers. The ERC has 257 trained volunteers which are prepared to act during the emergency situation. The ERC works in cooperation with Ministry of Interior, Ministry of Social Affairs, Estonian Rescue Service, Police and Border Department. In 2013 in cooperation with the Finnish RC the ERC started the training of volunteers for participation in foreign missions. The structure of the organisation consists of network of 16 local branches. The General Assembly meets every four years and elects the ERC Chairman, Head Committee, the Executive Board, as well as the auditing commission and the commission of statutes and ethics. Every local branch has its own board and auditing commission.⁸⁷⁶

The Estonian authorities are looking at potential solutions for improving and upgrading the existing operational capabilities for data exchange. It is likely that many private entities will take part in the EU funded projects and programmes within the civil security domain.⁸⁷⁷

⁸⁷² ANVIL Project Country Study: Estonia, p.20

⁸⁷³ <http://www.kaitseliit.ee/en/edl>, [last accessed 13.09.2014](#)

⁸⁷⁴ ANVIL Project Country Study: Estonia, p.22

⁸⁷⁵ Ibid., p.23

⁸⁷⁶ <http://www.redcross.ee/en/index.html>

⁸⁷⁷ ANVIL Project Country Study: Estonia, p.24

3.2 Organisational cooperation

International cooperation

Estonia has signed regional and multilateral provisions of the Council of Europe, the European Union, NATO and OSCE for assistance in crisis situations. However, Estonia has not officially requested assistance in the form of international support or cross-border assistance.

Operational cooperation within the European Union and Estonia has taken place mainly by information exchange and joint events and exercises.⁸⁷⁸ Estonia actively participates in several working parties as well as hosting conferences regularly. Estonia has been an active initiator in the field of maritime cooperation and of strategic and operational dialogue among the Baltic Sea countries. The European Commission contributes to research and professional civil security training, which has been mainly facilitated by the Estonian Academy of Security Sciences.

The Academy is a state institution that provides professional education for civil servants, under the umbrella of the Ministry of the Interior. Its goal is through internal security related academic education, research and development activities to create a secure state and conditions for stable development across the state of Estonia.⁸⁷⁹

Cross-border cooperation

Cross-border operation cooperation is essential in crisis management due to the fact that the emergency may affect more than one country, for example in a major flood or forest fire. Therefore the development of transnational cooperation between states and international organisations in disaster management remains a key task. Another benefit of such cooperation is in the cases in which one state does not have enough resources and capabilities to cope with the emergency situation on its own. In such scenarios it is necessary to have effective cooperation with the neighbouring countries and international organisations.

Estonia has signed a series of agreements for cooperation in the rescue and crisis management domain with its immediate neighbours. Additionally, Estonian experts participated in EU Civil Protection Mechanism missions during EU citizens' evacuation from Lebanon through Cyprus (2006); in Environmental Assessment Mission in fire devastated areas of Nagorny-Karabakh (2006); in the floods in Ukraine and Moldova (2008); in the disaster following the 2010 earthquake in Haiti; the floods in Pakistan (2010) and Moldova through BaltFloodCombat (2010).⁸⁸⁰

BaltFloodCombat is a cross-border cooperation project between Estonia, Latvia and Lithuania. The three Baltic States are represented respectively by the Estonian Rescue Board, Latvian Fire and Rescue Service and Lithuanian Fire and Rescue Department under the Ministry of the Interior. The project is within the framework of Preparatory Action of the Civil Protection Mechanism and is

⁸⁷⁸ ANVIL Project Country Study: Estonia, p.28

⁸⁷⁹ Ibid, p.28

⁸⁸⁰ Jevgeni Jutkevits, Eva-Liisa Ristsoo, Kriisireguleerimise osakond, Päästeamet Sūgis, 2010, p.2

funded by the European Commission. The European Commission finances 80% of the project while the remaining funding comes from the national budgets. The aim of the project is to create reliable and efficient national flood response capacity, and also to establish and register in CECIS a multinational High Capacity Pumping (HCP) module, consisting of commonly trained personnel and up-to-date equipment. Main objectives of the project include enhancing national flood response capability; strengthening European rapid response capacity, and also to discover, through innovative approach, possibilities and ways of multilateral civil protection capacity building.⁸⁸¹

Estonia conducts operational cooperation with the EU through the Estonian Disaster Relief Team's participation in the following EU exercises: ESCEX (2004), Finland and EU POLEX (2005), Poland, which simulated earthquake and other related emergencies in a fictitious third country; DANEX Denmark (2006), which anticipated terrorist accidents and severe weather scenarios; FLOODDEX (2009), Netherlands, exercising reaction in flooding situation; and EU CREMEX (2011). Additionally, Estonia participated in 2010 AMPS EU Civil Protection Mechanism and 2011 MUSAR exercises in Germany/Netherlands.⁸⁸²

Another on-going cross-border cooperation initiative was established in 2007 with the Estonia - Latvia Programme. The programme is implemented according to the principles of European Territorial Cooperation and it supports cross-border cooperation between the two countries. It is funded by the European Regional Development Fund, the Republic of Estonia and the Republic of Latvia. The objective of the Programme is to promote sustainable development and economic competitiveness through achieving an integrated and cross-border approach to economic, social and environmental development in ways, which involve and benefit local people and communities. Under the Estonia – Latvia Programme the JATE Project (Building Cross-border Capacity to Perform Joint Activities in Tough Environment) was created and implemented by the Estonian Rescue Board and the Latvian State Fire and Rescue Service.⁸⁸³

This project's goal is to look for ways for improving the initial reaction capabilities in remote areas and for rescue events. The aim is to reduce the response times and capacity building in areas where access is difficult or limited, and there are no fire-fighting water supplies needed.⁸⁸⁴

Further, the Framework Agreement between Estonia and Latvia for mutual assistance in the event of natural or technological disasters relates to the co-operation and rendering of mutual assistance in the event of a disaster with the aim of preventing or avoiding human casualties and damage to the health, environment and property. According to the Framework Agreement either country could request assistance directly from the competent authorities of the other Contracting Party. The

⁸⁸¹ http://www.baltfloodcombat.eu/index.php?option=com_content&view=article&id=22:whats-new-in-15&catid=29:the-cms, [last accessed 13.09.2014](#)

⁸⁸² Jevgeni Jutkevits, Eva-Liisa Ristsoo, Kriisireguleerimise osakond, Päästeamet Sūgis, 2010, p.4

⁸⁸³ <http://www.estlat.eu/programme/about-programme/>, [last accessed 17.09.2014](#)

⁸⁸⁴ <http://www.estlat.eu/supported-projects/?project=65>, [last accessed 19.09.2014](#)

competent authorities maintain direct contacts and for Estonia they are the Ministry of Internal Affairs; the Rescue Board; and the Radiation Protection Centre.⁸⁸⁵

Moreover, the Estonian Rescue Board and the Republic of Latvia have signed a national fire and rescue cooperation agreement, which foresees joint actions for implementing and facilitating the provision of assistance and cooperation in cross-border rescue operations, to develop operations applicable to common procedures and plans, and to develop cooperation in research and development programs reflecting the information and disaster response experiences.⁸⁸⁶

Estonia has signed an agreement with the Government of the Kingdom of Sweden for emergency prevention, preparedness and consequence management. According to this agreement the countries will cooperate in the development of appropriate preventative measures to protect people, the environment and cultural heritage and other assets of natural, technological and environmental disasters. The Parties undertake to provide mutual assistance within its means and in accordance with the cooperation agreement.⁸⁸⁷

Additionally, agreement with Finland for maritime and aeronautical search and rescue has been signed. Its provisions extend to the responsibilities, the operational guidelines and implementation of the maritime and aeronautical search and rescue cooperation.⁸⁸⁸

The operational cooperation of Estonia in the Baltic region and with the EU is also conducted with the Baltic every day accident, disaster prevention and resilience (BaltPrevResilience) project. The project organised between Sweden, Finland, Estonia, Denmark, Poland and Latvia. The project coordinator is the Swedish Emergency Management Agency (MSB). Other partners in the project include Finnish National Institute for Health and Welfare, Injury Prevention subdivision (THL), Estonian Rescue Board, Frederikssund-Halsnæs Fire & Rescue Service, FHFRS, Denmark, Main School of Fire Service Warsaw, SGSP, Poland, Jelgava City Municipality, JCM, Latvia and Karlstad University of Sweden. In addition to the seminar are invited to participate in the Norway, Iceland and Lithuania Representatives.⁸⁸⁹ The aim of the project is to prevent and reduce consequences of accidents and crises and to create a common understanding of accident statistics and evaluation of experiences. It also aims at establishing a platform for sharing statistics, experiences, best practices and methodology for lessons learned.⁸⁹⁰

⁸⁸⁵ Framework Agreement between the Government of the Republic of Latvia and the Government of the Republic of Estonia on Mutual Assistance in the Event of Disasters

⁸⁸⁶ Framework Agreement between the Government of the Republic of Latvia and the Government of the Republic of Estonia on Mutual Assistance in the Event of Disasters

⁸⁸⁷ <http://www.rescue.ee/oigusaktid/leping>, last accessed 12.09.2014

⁸⁸⁸ <https://www.riigiteataja.ee/akt/79169>, last accessed 19.09.2014

⁸⁸⁹ <https://www.msb.se/en/About-MSB/International-co-operation/EU-work/EU-project-BaltPrevResilience/About-the-project/>, last accessed 18.09.2014

⁸⁹⁰ Ibid.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The information could not be obtained within the given timeframe. Within the framework of this country study such procedures have not been highlighted in policy or legislative documents related to civil protection or crisis management.

4.2 Operations planning

The ANVIL study identifies four levels of responsibility for operational crisis management: state level, regional level, municipal/county level, and private/volunteer level, and also describes the operational procedures in case of crisis:

Operational crisis management responsibility typically lies with the counties and independent cities and municipalities. Depending on the character of the crisis and available resources, local and regional authorities may include permanent staff for civil security tasks. Once a state of emergency or state of disaster has been declared, the counties or independent cities may form specialized task forces that are led and coordinated by the local political actor or institution. Specialized state agencies will provide assistance when needed and when the situation escalates.⁸⁹¹

Civil protection planning in Estonia consists of risk-based planning, holistic preparedness planning, national contingency planning (central, national), planning methodologies, risk analysis and risk assessment methodologies. Particular feature of the planning mechanism is the bottom-up approach where plans are prepared at local, regional and national levels. Every national institution concerned has to prepare its own contingency plans.⁸⁹²

The Government Regulation No. 17, in force 21 June 2010, titled “Guidelines for preparing continuous operation plans”, regulates the organisation of the preparation of plans for the continuous operation of vital services provided by a provider of vital services. The document provides specific guidance for the organisation of the preparation of plans, the preparation of plans itself and the terms and conditions for introducing the plan.⁸⁹³

According to the Emergency Act an emergency plan is a document, which describes the organisation and the management structure of responding to emergencies, the responsibilities of the agencies participating in responding to emergencies and the organisation of informing the public of

⁸⁹¹ ANVIL Project Country Study: Estonia, p.15

⁸⁹² http://ec.europa.eu/echo/files/civil_protection/vademecum/index.html, last accessed 19.09.2014

⁸⁹³ Government Regulation No. 17, passed 08.06.2010, regarding “Guidelines for preparing continuous operation plans”

emergencies. These components are valid at national and, if necessary, on the regional and local government level. The Government is responsible for the establishment of a list of emergencies that require preparation of an emergency plan and enacts the competent agencies of the executive state power to prepare it.⁸⁹⁴

The Government establishes a list of emergencies, identifying which emergency plan has to be prepared, and subsequently appoints the competent executive power agencies to prepare the emergency plan. The emergency plans are then approved by a regulation of the Estonian Government. The plans need to be updated regularly, at least once in every two years, while the Government has the obligation to amend the list of emergencies at least every two years. The guidelines for preparing the emergency plans are established by a regulation of the Minister of the Interior.⁸⁹⁵

4.3 Logistics support in crises

The Estonian Disaster Relief Team occasionally participates in international humanitarian missions, as it was the case in 2012, when the Team provided logistical support to the UNHCR refugee camp in Dollo Ado, Ethiopia.⁸⁹⁶

Additional information could not be obtained within the given timeframe as it requires internal agency-specific information.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

According to the Emergency Act, the Ministry of the Environment shall organise the continuous operation of the following vital services, such as functioning of air surveillance and early warning; hydrological and meteorological monitoring and early warning; and the functioning of the system for early warning of a risk of radiation.⁸⁹⁷

There are three crisis management committees on national level, on regional level and on local level. In case of an emergency they are called together and take necessary actions to solve it.⁸⁹⁸

According to the procedures set out in the Emergency Act in case of emergency, natural persons must notify immediately the 112 emergency helpline about the impending risk they have

⁸⁹⁴ Emergency Act, Chapter II, art.2 (7)

⁸⁹⁵ Ibid, p.5-6

⁸⁹⁶ <http://vm.ee/et/node/2714>, last accessed 15.09.2014

⁸⁹⁷ Emergency Act, Chapter IV, art.34 (5)

⁸⁹⁸ AN ANVIL Project Country Study: Estonia VIL, p.21

encountered. Agencies or legal persons have to notify the Ministry of the Interior of the emergency that has occurred in the fulfilment of their responsibilities or in their area of activity.

The Government has the obligation to establish the procedures for notifying the public of the impending risk of the occurrence of an emergency and the response to the emergency, the requirements for the information to be communicated as well as the organisation of exchange of information between the agencies and persons responding to the emergency.⁸⁹⁹

The Estonian Information System Authority (RIA) coordinates the cooperation, development and administration of the state information systems and also organises activities related to information security and handles the security incidents occurred in Estonian computer networks.⁹⁰⁰ The RIA provides advisory services for the providers of public services on how to manage their information systems and if required monitors them. In addition, RIA is an implementing entity of the structural assistance of the European Union.⁹⁰¹

An early warning system is expected to be implemented, allowing the public to be notified of the occurrence of accidents and emergencies. The system will be able to warn about the possible failure in communication and power. In 2011, the Rescue Board with the Estonian National Broadcasting implemented a project for providing operational information to the public, in case of emergencies.⁹⁰²

Additionally, Estonia has an automated Early Notification System that is in place for emergencies, composed of 10 Permanent Monitoring Stations. However, the systems' capabilities are outdated and in need of an upgrade.⁹⁰³

The country also has an early radiation warning system which is used to identify and notify of any radiation accidents at nuclear plants in neighbouring countries. Estonia devotes efforts to enhance radiation protection, as well as to ensure the safety of nuclear power plants and reduce radioactivity within the Baltic Sea region.⁹⁰⁴

⁸⁹⁹ Security Policy 2014, p.69

⁹⁰⁰ ANVIL Project Country Study: Estonia, p.21

⁹⁰¹ Ibid., p.22

⁹⁰² Security Policy 2014, p.69

⁹⁰³ Estonian National Report on lessons learned and actions taken in response to the Fukushima Daiichi nuclear accident, p.5

⁹⁰⁴ National Security Concept 2010, p.19

5 Capabilities

5.1 Human resources

Over the last four years the Rescue services in Estonia have significantly improved based on the experience from past crises and emergency situations. There are more than 6,000 people working in the field of civil security in Estonia.⁹⁰⁵ For example, air rescue units are capable of reaching people and ships in need of assistance within one hour and 45 minutes, while helicopter and airplane crews are on duty from 09.00 to 17.00 to perform patrol flights.⁹⁰⁶

Since 2011 the rescue capability was enhanced through restructuring - nine units were closed and the rescuers were transferred to other insufficiently manned units. In 2013 Estonia had 65 units with 24-hour capability, with at least three rescuers on alert at all times and able to offer real assistance to people in case of an accident. The speed of the rescuers to reach people also improved, compared to previous years. Another result from the restructuring of the rescue services was the improved service coverage as rescue workers are 15 minutes away from 93% of the population. The decrease in the number of fatal accidents, compared to 2011, reveals the high standard and preparation of the rescue capability and rescue units.⁹⁰⁷

Estonia has developed the capability to provide rescue and humanitarian aid that meets international standards and allows the country to send the Estonian Disaster Relief Team (EDRT) to tackle disasters and crises.⁹⁰⁸ The fundamental goal of the Estonian Disaster Relief Team is to ensure the readiness of the country to participate in international rescue and humanitarian aid operations and, when necessary, react to possible emergencies in Estonia. The Team has been sent on missions by the Foreign Ministry in cooperation with the Estonian Rescue Service if a request by the UN, EU, or nations has been submitted. The EDRT has participated in humanitarian aid missions in Namibia, Pakistan, and Indonesia, as well as in Poland, Moldova and Latvia.⁹⁰⁹

The specialists in the Disaster Relief Team are primarily in the fire-fighting or rescue service, however there are representatives from the border guard, police force, medical institutions, and other government or private institutions. The operational capability envisages a search and rescue unit, a medical unit, and a chemical unit. The team also comprises of a support unit and expert group.

In 2013 the number of certified volunteer rescue workers increased significantly to almost 1,300 volunteers distributed along more than 100 units and contributing over 2,500 working hours to fire safety prevention and disaster response. In the 2014 Security Policy document, prepared by the Ministry of Interior, is anticipated that by 2016 Estonia should have 1,600 volunteers for prevention

⁹⁰⁵ ANVIL Project Country Study: Estonia, p.15

⁹⁰⁶ Ibid, p.51

⁹⁰⁷ Security Policy 2014, p.27

⁹⁰⁸ <http://vm.ee/en/estonia-provider-humanitarian-aid>, last accessed 19.09.2014

⁹⁰⁹ Ibid.

and rescue work. Where possible, volunteers are also provided with equipment and other technical aids. Volunteer maritime rescuers participated in 31 rescue operations in 2013, compared to 23 in 2014. 54 people were saved by the police and volunteers together. Volunteers also participated in joint trainings and drills.⁹¹⁰

Additionally, Estonia is in cooperation with other countries, pursuing safety of navigation in the Baltic Sea along the Gulf of Finland. In this regard special attention is paid to search and rescue at sea and the development of capabilities of detecting and response to marine pollution.

5.2 Materiel (non-financial) resources

The Government forms an operation stockpile, or contractually secured resources in case of an emergency, to be used for mitigating the consequences of a crisis. Usually these stockpiles contain health and food supplies.⁹¹¹

The state healthcare stockpile shall be formed by the Ministry of Social Affairs or an agency in the area of governance of the Ministry of Social Affairs appointed by a decree of the Minister of Social Affairs. The state food stockpile shall be formed by the Ministry of Agriculture or an agency in the area of governance of the Ministry of Agriculture appointed by a decree of the Minister of Agriculture. Other stockpiles shall be formed by state agencies appointed by orders of the Government of the Republic. Entities forming the state operation stockpiles shall be responsible for the organisation of the storage, use, control, and renewal and reporting of the stockpile.⁹¹²

The government establishes by regulation the procedures for storage, use, control and renewal and reporting of state operation stockpiles.⁹¹³

Moreover, Estonia has signed a contract for the procurement of a multifunctional ship intended for localising pollution incidents and for pollution control. In addition, in 2014 Estonia purchased various life-saving capabilities that include 90 thermal cameras, 12 hydraulic equipment and 17 telescopic poles for the 66 state rescue crews. The use of thermal cameras helps rescue crews effectively identifying the location of people in premises filled with thick smoke while the telescopic rescue poles will improve the water rescue capability.⁹¹⁴

One of the main hazards and area of concern for Estonian crisis management authorities is forest fire. In order to better respond and ensure preparedness of the population, vital service providers and enterprises, and to mitigate the consequences of forest fires, the State Forest Management

⁹¹⁰ Security Policy 2014, p.38-44

⁹¹¹ Emergency Act, Chapter III, art.42

⁹¹² Emergency Act, Chapter III, art. 42 (4)

⁹¹³ Ibid., art 42 (7)

⁹¹⁴ Security Policy 2014, p.78

Centre (RMK) placed over 250 labels “Fire” and installed fire separators in over 340 kilometres of actively visited forest areas.⁹¹⁵

In 2015 the Estonian rescue workers are expected to be equipped with additional aerial ladders and trucks that will enable the team to reach people in need of assistance in higher buildings and places.

The Estonian Red Cross has more than 25 trained volunteers prepared to act during the emergency situation. In addition, cooperation with the Finnish Red Cross started for training of volunteers for participation in foreign missions. Further, 20 Estonian Red Cross volunteers have been involved in the training cycle. One ERC volunteer has been involved in international team in foreign mission – 2013 August-September assembling the field hospital in Jordan and 2013 December/2014 January working at the basic health clinic in Philippines.⁹¹⁶

5.3 Training

The Emergency Act of Estonia states that national emergency response exercises shall be conducted at least once in every four years. The aim of the exercises is to assess the procedures and capability of responding to one or more emergencies, which include all the competent agencies. The procedures for these exercises and the capabilities required shall be approved by the crisis management committee of the Government at national level. At regional and local levels the time and the organiser of regional emergency response exercises and emergencies as well as the capabilities that are assessed, shall be approved by the regional crisis management committee and local crisis management committee, respectively.⁹¹⁷

Nationally, there are two main organisations that provide extensive preparation for future rescue workers. The Rescue College of the Academy of Security Sciences and the Rescue School located in Väike-Maarja.

The Rescue College organises a four year higher education programme which allows students to acquire knowledge of rescue management, crisis management, monitoring of fire safety and prevention in the field of rescue work. The obtained qualifications and knowledge could then be applied in the specialty of rescue service, in the field of fire safety supervision, crisis management and operational service.⁹¹⁸

The Rescue School in Väike-Maarja provides vocational training that specializes in preparation of rescuers, rescue specialists, or dispatchers. The educational programmes use situational simulations to which every person taking on employment is exposed.

⁹¹⁵ http://www.rescue.ee/vvfiles/0/LISA1_RA_Metsa_maastikutulekahju.pdf, p.11

⁹¹⁶ <http://www.redcross.ee/en/activities.html>

⁹¹⁷ Emergency Act, Chapter II, art.8

⁹¹⁸ <http://www.sisekaitse.ee/eass/colleges/rescue-college/rescue-school/>, last accessed 1.12.2015

Estonia also maintains cooperation with foreign countries in the field of rescue training and education, which include Finland, Poland, Sweden, Latvia, Lithuania and Russia. Additionally, close interaction with the Rescue Board, the Regional Rescue Centers as well as with Tallinn University of Technology has been developed.⁹¹⁹

Training of volunteers is an important task for the Estonian crisis management authorities. In cooperation with the Ministry of Interior, the Rescue Board and the Police and Border Guard a seminar was held in 2010 for sea and lake rescue volunteer associations. Further, a yearly 2-day training event is organised, in order to practise and improve the skills needed during sea rescue operations and to practice cooperation between different parties.⁹²⁰ It is anticipated that by 2016 Estonia 30% of the volunteer rescuers for prevention and rescue work should undergo at least 10 hours of regular training of national rescue units.⁹²¹

The Estonian Ministry of the Interior develops the exercises while the Estonian Disaster Relief Team (EDRT) regularly participates in international exercises⁹²² The Estonian Disaster Relief Team participated in the 2008 NATO Uusimaa exercise conducted in Helsinki, Finland. The aim of the exercise was to practice the Euro-Atlantic Disaster Response Coordination Centre procedures and Euro-Atlantic Response Unit capabilities, in order to improve nations' ability to respond to a disaster. Furthermore, the collaboration and information sharing between international organisations and the capabilities of crisis management teams were exercised.⁹²³ The exercise enhanced the effectiveness of the national capabilities to effectively coordinate consequence management operations.

Other recent examples of cross-border and multinational training exercises include the sea rescue training event 2010 Baltic Sarex in Denmark and the joint practice and training event with sea rescue volunteers at Võsu. The EU Chemical and Radiological Emergency Management Exercise 2011 (CREMEX 2011) exercise was organised by the Estonian Ministry of Interior with the contribution by the EU, and its aim was to test the understanding, knowledge and response in the framework of the Union Civil Protection Mechanism.⁹²⁴ One of the main deliverables of the exercise was the testing of the coordination of assistance through the EU Monitoring and Information Centre, as well as the successful testing of the Estonian Emergency Act. The exercise provided valuable experience to the Civil Protection teams from the different participating EU members and organisations which participated. The exercise exploited the opportunity to use a complicated CRBN scenario within two different locations in Estonia – the city of Tartu and Tallinn Airport, thus involving all relevant authorities who have their role in Estonia responding to Chemical and Radiological incidents.

The exercise managed to achieve its objectives and to test and verify the operational and strategic procedures for resolving CRBN emergency, as well as to test the EU Mechanism for Civil Protection and coordination. CREMEX 2011 also accomplished its goals by enhancing operational cooperation

⁹¹⁹ <http://www.sisekaitse.ee/eass/index.php?id=14072&highlight=crisis,management>, last accessed 19.09.2014

⁹²⁰ Security Policy 2011, p.52

⁹²¹ Security Policy 2014, p.38-44

⁹²² http://ec.europa.eu/echo/files/civil_protection/vademecum/ee/2-ee-3.html, last accessed 18.09.2014

⁹²³ <http://www.rescue.ee/suuroppus-uusimaa-2008>, last accessed 16.09.2014

⁹²⁴ <https://www.siseministeerium.ee/cremex2011eng/>, last accessed 19.09.2014

between all involved parties and provided learning opportunities, and also by providing valuable lessons learned for tactical response and inter-organisational co-operation.⁹²⁵ The results of the exercise provided valuable experience in testing arrangements in requesting and receiving international assistance. During the exercise Estonia tested its crisis management system and coordination of international assistance.⁹²⁶

5.4 Procurement

5.4.1 Procurement regulation

Please see below (p. 5.4.2), additional information could not be obtained within the given timeframe.

5.4.2 Procurement procedures

Public procurement in Estonia is regulated by the Public Procurement Act and supplemented with several regulations of the Government of Estonia. The Ministry of Finance is the institution responsible for public procurement policy, related legislation, providing supervision and consulting.

Public Procurement notices are published on-line in the central State Public Procurement Register and all contracting authorities and suppliers have access to the information. Additionally it is possible for suppliers to access electronic tendering documents in case the contracting authority has made them available in the register.⁹²⁷

5.5 Niche capabilities

Estonia has to carefully concentrate its R&D investments in a few niche areas, where it can achieve excellence.⁹²⁸

The BaltFloodCombat initiative is already producing excellent results in reacting to floods. The capabilities of the three-nation initiative could be deployed in EU Member States in need of immediate support in tackling emergency situations caused by floods. In the near future the initiative intends to work not only for strengthening national and European rapid response capacity in one of the most common types of disaster, but also to show, through the innovative approach, possibilities and ways of multilateral civil protection capacity building. The team has been deployed in the 2014 floods in the Western Balkans and in Moldova (August 2014).⁹²⁹

⁹²⁵ <https://www.siseministeerium.ee/cremex2011eng/>, last accessed 19.09.2014

⁹²⁶ Estonian National Report on lessons learned and actions taken in response to the Fukushima Daiichi nuclear accident, p.6

⁹²⁷ <http://www.fin.ee/public-procurement-policy>, last accessed 18.09.2014

⁹²⁸ Defence Research & Development: Lessons from NATO Allies, International Centre for Defence Studies Project Report, p.37-39

⁹²⁹ http://www.baltfloodcombat.eu/index.php?option=com_content&view=frontpage&Itemid=28, last accessed 17.09.2014

Additional niche capability in which Estonia could realistically contribute to the European crisis management community is the development of software solutions comprised of several knowledge elements, which include cyber defence, programming of autonomous platforms and systems, etc.⁹³⁰

Following the cyber-attacks in Estonia, the state has focused efforts for ensuring the safety of its critical infrastructure and maintaining vital services. Many experts and IT specialists have been trained and prepared to work in this environment. Estonia could provide software solutions and expertise from which EU member states could benefit and establish new ways for cooperation in the cyber security field.

An example in this sphere is the establishment of NATO Cooperative Cyber Defence Centre of Excellence. It is a NATO-accredited research and training facility dealing with education, consultation, lessons learned, research and development in the field of cyber security. The Centre's work will contribute not only to NATO competence in the cyber defence field, but also for the enhancement of the national expertise of Estonian authorities.

The EU could potentially develop cooperation with the Centre for collaboration on projects related to the cyber security domain, or even establish similar centres for research and analytical activities in the field.

Furthermore, Estonia has been an active initiator in the field of maritime cooperation and of strategic and operational dialogue among the Baltic Sea countries. Many projects have been initiated in this domain, where Estonia could contribute not only to cross-border cooperation, but also in international exercises, events and missions.

⁹³⁰ Tomas Jermalavičius, *Defence Research & Development: Lessons from NATO Allies*, International Centre for Defence Studies Project Report, November 2009, p.36

Resources

Legislative acts

Emergency Act, adopted 15 June 2009
Rescue Act, adopted 5 May 2010
Emergency act, adopted 22 November 2000
Public Procurement Act, adopted 24 January 2007
Fire Safety Act, adopted 5 May 2010
Personal Data Protection Act, adopted February 2003
State of Emergency Act, adopted 10 January 1996
International Civil Missions Act, adopted 9 April 2011

Other normative acts

Guidelines for preparing continuous operation risk assessments, adopted 21 June 2010

Official documents (white papers, strategies, etc.)

National Security Concept of Estonia, adopted 12 May 2010
Ministry of Defence, National Defence Strategy of Estonia 2011
Ministry of Interior, Security Policy 2010
Ministry of Interior, Security Policy 2011
Ministry of Interior, Security Policy 2013
Ministry of Interior, Security Policy 2014
Strategy of the Estonian Rescue Board 2015-2025
Ministry of Defence, Cyber Security Strategy 2008
Estonian National Report on lessons learned and actions taken in response to the Fukushima Daiichi nuclear accident
Emergency Preparedness of Estonia, Report of the National Audit Office to the Riigikogu, Tallinn, 16 May 2007

Online resources (e.g. websites of key CM organisations)

<https://www.siseministeerium.ee/> - [Ministry of Interior](#)
<http://vm.ee/en> - [Ministry of Foreign Affairs](#)
<http://www.kaitseministeerium.ee/en/documents> - Ministry of Defence
<http://www.fin.ee/> - [Ministry of Finance](#)

<http://www.rescue.ee/> - Estonian Rescue Service
http://ec.europa.eu/echo/files/civil_protection/vademecum/index.html - [EC ECHO - Civil Protection](#)
http://www.astra-project.org/06_winterstorm_study.html - [ASTRA Winter-storm study](#)
<http://www.estlat.eu/programme/activities-supported/> [Estonia – Latvia Programme](#)
http://www.baltfloodcombat.eu/index.php?option=com_content&view=frontpage&Itemid=28
[– BaltFloodCombat organisation](#)
<http://www.welcomeurope.com/europees-nieuws/supporting-estonia-in-dealing-with-storm-disaster-in-2005-9911+9811.html#afficheTexte>
<http://vm.ee/en/estonia-provider-humanitarian-aid>
<https://www.riigiteataja.ee/akt/79169>
[https://www.msb.se/en/About-MSB/International-co-operation/EU-work/EU-project-BaltPrevResilience/ About-the-project/](https://www.msb.se/en/About-MSB/International-co-operation/EU-work/EU-project-BaltPrevResilience/About-the-project/)
<http://www.redcross.ee/en/index.html>
<http://www.kaitseliit.ee/en/edl>
https://en.wikipedia.org/wiki/Estonian_Rescue_Board
<https://www.enisa.europa.eu/activities/Resilience-and-CIIP/workshops-1/2015/cyber-security-strategies-critical-information-infrastructures-protection-and-ics-scada-event/ciip-in-estonia>
<http://www.preventionweb.net/countries/est/data/>
<http://www.redcross.ee/en/activities.html>
<http://www.politsej.ee/en/organisatsioon>
<http://www.rescue.ee/oigusaktid/leping>
<http://www.redcross.ee/en/activities.html>
<http://www.sisekaitse.ee/eass/colleges/rescue-college/rescue-school/>

Publications

ANVIL Project Country Study: Estonia, Timo Hellenberg and Pekka Visuri, June 2013

Are Kont, Jaak Jaagus, Kaarel Orviku, Valdeko Palginõmm, Urve Ratas, Reimo Ravis, Ülo Suursaar, Hannes Tõnisson, *The 9 January 2005 storm impact on the Estonian coastal area*

Tomas Jermalavičius, *Defence Research & Development: Lessons from NATO Allies*, International Centre for Defence Studies Project Report, November 2009

Terhi Elomaa & Anna Halonen, *EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region*, November 2007

Christer Pursiainen, Sigrid Hedin And Timo Hellenberg, *Civil Protection Systems in the Baltic Sea Region - Towards Integration in Civil Protection Training*, Aleksanteri Institute, Helsinki, 2005

Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters, United Nations International Strategy for Disaster Reduction

National development trends in volunteer rescue work 2013-2016

Christopher, S. Chivvis, *EU Civilian Crisis Management- The Record So Far*, RAND National Defense Research Institute, 2010

International CEP Handbook 2009 - Civil Emergency Planning in the NATO/EAPC Countries, Swedish Civil Contingencies Agency (MSB), 2009

Strategic Evaluation on Environment and Risk Prevention under Structural and Cohesion Funds for the period 2007-2013, National Evaluation Report for Estonia, Main Report by Directorate General Regional Policy, GHK Brussels, 10 November 2006

Estonian Defence Handbook 2010

Jevgeni Jutkevitš, Eva-Liisa Ristsoo, Kriisireguleerimise osakond, Päästeamet Sügis, 2010

Expert interviews

Expert from the academic field (13 November 2014).



Driving Innovation in Crisis Management for **E**uropean **R**esilience

FINLAND

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: FhG-INT (Isabelle Linde-Frech, Maike Vollmer)



Source: Finnish Ministry of the Interior http://www.intermin.fi/en/ministry/the_flag_and_arms_of_finland

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Finland has set the objective to become the safest country in Europe with the most effective rescue services. If the country's exposure to disaster risks appears lower than other EU or OECD countries, its specific vulnerabilities to major shocks justify such ambitious public policy goals. The high dependence on critical infrastructures and global supply chains for the security of Finnish society and economy, its sparse population in remote areas, and its Nordic climate conditions are all factors shaping the risk portfolio Finland has to manage and prepare for. In this context, Finland has developed advanced policies and capacities in risk management, with well-established cutting-edge national strategies. These are based on whole-of-society approaches to secure the vital functions of society, and to develop self-awareness. These policies benefited also from a high level of trust among citizens, a cooperative attitude in society and a sense of solidarity, and high-quality public services from national to local levels. Furthermore, considerable use of research and information and communications technology (ICT), and the highly developed education system and social policies in Finland, contribute to an effective national risk management system which takes advantage of state-of-the-art innovations.

The Finnish disaster risk management system boasts:

- An ambitious **whole-of-government and whole-society approach** to address all-hazards and threats.
- A strong sense of autonomy and self-preparedness among the population.
- Well-developed interactions with the private sector to **ensure business continuity**.
- A significant **use of research and technological innovation** to support policies and capacities.
- An **open-data policy** allowing appreciable availability of risk-related information.
- **Government agility**, with a willingness to reform and learn from past experience.
- Strong regional cooperation mechanisms supporting risk management.⁹³¹

*The Finnish civil security system could be characterised by a high degree of decentralisation and divided tasks based on substantial expertise of and competences across levels and issues.*⁹³² A main role in this heavily decentralised system takes the **Ministry of the Interior** with its **Department for Rescue Services**, which, inter alia, directs and steers regional rescue services (22), maintains oversight of their coverage and quality and is in charge of the preparedness and organisation of rescue services at national level as well.

Funding for risk management comes from different sources such as Government budget, municipalities' budget and specific financial mechanisms. As in most other European and OECD countries, Finland has not made a comprehensive estimation of the resources spent on disaster risk reduction from the national to the local level. (Peer Review Report, 2014).

⁹³¹ Key findings (p.6) of the *Peer review report Finland* (2014)

⁹³² Country Study: Finland. The ANVIL project. June 2013 (p.2)

Table of Contents

FINLAND Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	653
Overview.....	654
Table of Contents	655
List of Figures	657
List of Tables.....	657
List of Abbreviations.....	658
List of Definitions	659
1 Policy	660
1.1 Risk Assessment	660
1.1.1 Key risks and areas of concern	660
1.1.2 Risk assessment approaches	661
1.1.3 International Cooperation with regard to risk assessment.....	663
1.2 Policy and Governance	665
1.2.1 Strategy scope and focus.....	669
1.2.2 Monitoring and analytical support to policy making; R&D	670
1.2.3 Policy for Prevention	670
1.2.4 Policy for Preparedness.....	670
1.2.5 Policy for Response	671
1.2.6 Policy for Relief and Recovery	671
1.3 Financing	671
1.3.1 Investing in preparedness	671
1.3.2 Investing in consequence management.....	672
1.4 Policy review, Evaluation & Organisational Learning	673
1.4.1 Post-Disaster Assessment.....	673
1.4.2 Departmental Lessons Learned systems	673
1.4.3 Centralised (national) Lessons Learned system	674
1.4.4 International exchange for Lessons Learned.....	674
1.4.5 Regular policy reviews.....	674
1.5 Resilience	676
1.6 Information sharing and data protection	676

2	Legislation	677
2.1	Crisis (emergency, disaster) management concept.....	677
2.2	General crisis (emergency, disaster) management law	677
2.3	Emergency rule	678
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	679
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	679
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	680
2.7	Legal regulations for international engagements of first responders and crisis managers	680
3	Organisation	682
3.1	Organisational chart.....	682
3.2	Organisational cooperation	687
3.2.1	National Cooperation	687
3.2.2	International Cooperation.....	688
3.2.3	Operational aspects regarding international assistance	690
4	Procedures	693
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	693
4.2	Operations planning.....	693
4.3	Logistics support in crises	694
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	695
5	Capabilities	697
5.1	Human resources	697
5.2	Materiel (non-financial) resources	698
5.3	Training	698
5.4	Procurement	700
5.4.1	Procurement regulation	700
5.4.2	Procurement procedures	701
5.5	Niche capabilities	701
	Resources	702
	Legislative acts	702
	Other normative acts	704
	Official documents (white papers, strategies, etc.)	704
	Online resources (e.g. websites of key CM organizations)	705
	Publications	706

List of Figures

<i>Figure 1: Flow-chart of the HELCOM Monitoring and Assessment System described in the HELCOM Monitoring and Assessment Strategy</i>	<i>665</i>
<i>Figure 2: Organisational Chart of the Crisis Management Structure of Finland</i>	<i>682</i>
<i>Figure 3: The principle of the management of disturbances.....</i>	<i>683</i>
<i>Figure 4: The 22 Rescue Services Regions of Finland.....</i>	<i>685</i>
<i>Figure 5: Public-Private Partnership in Security of Supply.....</i>	<i>688</i>

List of Tables

<i>Table 1: Disaster Risk of Finland and of neighbouring countries according to the World Risk Index 2014.....</i>	<i>661</i>
<i>Table 2: (Top 10) Natural Disasters in Finland for the period 1900 to 2014</i>	<i>661</i>
<i>Table 3: 49 Strategic tasks which are central to securing society's vital functions and the ministry responsible for the development of each strategic task</i>	<i>668</i>

List of Abbreviations

CM	Crisis Management
DRR	Disaster Risk Reduction
FEI	Finnish Environment Institute (finish name: SYKE)
FMI	Finnish Meteorological Institute
HFA	Hyogo Framework for Action
PLOPC	Policy, Legislation, Organisation, Procedures & Capabilities
PMO	Prime Minister's Office
MoJ	Ministry of Justice
MFA	Ministry for Foreign Affairs
MoD	Ministry of Defence
Mol	Ministry of the Interior
MoAF	Ministry of Agriculture and Forestry
MoE	Ministry of the Environment
MoF	Ministry of Finance
MoSAH	Ministry of Social Affairs and Health
MoEE	Ministry of Employment and the Economy
MoTC	Ministry of Transport and Communications
MoEC	Ministry of Education and Culture
NESA	National Emergency Supply Agency
OECD	Organisation for Economic Co-operation and Development
SYKE	Finnish Environment Institute (=FEI)
TUVE	Turvallisuusverkkohanke (Government Security Network)
VITRE	Viranomaisverkko (Public Authority Network)

List of Definitions

Comprehensive concept of security	The comprehensive concept of security comprises security issues which, if exacerbated, may turn into threats that can jeopardise or seriously harm Finland, Finns or the functions vital to Finnish society. Wide-ranging threats include premeditated action such as the use of military force, terrorism or interference with information networks. They can also occur spontaneously, such as widespread failures of the electric grid or extreme forces of nature.
Disturbance	This is a threat or an occurrence which endangers security in society, capacity to act or the population's living conditions. Co-operation and communication of the authorities and other actors on a wider or more intensive scale are needed to manage the situation.
Threat assessment	An assessment of a competent authority or another actor, based on a threat scenario and regarding the tasks the authority is responsible for and disturbances. The scenario concretely describes the origin of the threat, target, method of implementation, probability, effects on the authority's tasks as well as response options and the time required for advance preparations.
Threat scenario	A threat scenario is a general description of disturbances in the security environment. It presents the impact mechanism, source, target and impact on the target, probability and the most serious disturbances in the threat scenario that are identified.

1 Policy

1.1 Risk Assessment

1.1.1 Key risks and areas of concern

In Finland, the most likely types of *natural disasters* are hydro meteorological disasters with an emphasis on floods, storms, forest fires and problems caused by exceptional temperatures and drought. In addition to these, the Finnish Policy Framework also takes into account that Finnish people abroad can be affected by earthquakes, tsunamis and volcanic eruptions.

The *impact of climate change* on Finland's ecosystems and society is evaluated by the Finnish Environment Institute (FEI / SYKE (after the Finnish name))⁹³³ based on different climate change scenarios provided by the Finnish Meteorological Institute (FMI). The national strategy for adaptation to climate change of 2005⁹³⁴ was revised in 2014 and led to *Finland's National Climate Change Adaptation Plan 2022*⁹³⁵ and a new *Climate Act*⁹³⁶ (approved in 6.3.2015, see also). According to the Adaption Plan (p.10 ff), in all scenarios the temperature rise in Finland is above what is expected in the global mean temperature. Estimations range from 2,3 up to 6 degrees. It is expected that climate change may raise the risk e.g. for floods, which is significantly important in urban areas.

As can be seen from table 1 and 2, Finland is a country with a very low risk profile in terms of major natural disasters in general and of a specific type. The most disastrous incident for Finland in terms of natural disasters was the Tsunami in the Indian Ocean in 2004, which caused death for 179 Finnish citizens.

Regarding *man-made disasters*, there have been some technological disasters and transportation accidents. The sinking of the M/S Estonia in September 1994 is still the most disastrous civil security crisis in Finnish history. The ship with 989 people was en route from Tallinn to Stockholm over-night. The Estonia was in international waters but near Finnish territory, and therefore Finland was responsible for the international rescue operation. In total, 852 persons died.⁹³⁷

Due to Finland's low risk profile, national hazard maps are mainly limited to flooding, which also are available for some urban areas like Helsinki and Pori. Regarding earthquake risk assessment, this is only needed by nuclear power plants, in addition to a thorough evaluation of the risk of coastal flooding which is regularly updated for their sites. Comparable single-hazard risk assessments also exist for specific *man-made risks* such as chemical incidents, air and shipping accidents. Nuclear risks are a significant threat in relation with the country having four nuclear reactors and a fifth under construction, as well as a number of significant cross-border nuclear risks from neighbouring countries like Russia.⁹³⁸

⁹³³ Finnish Enviromental Institute SYKE <http://www.syke.fi/en-US>

⁹³⁴ Ministry of Agriculture and Forestry. Finland's National Strategy for Adaptation to Climate Change. 2005

⁹³⁵ Ministry of Agriculture and Forestry. Finland's National Climate Change Adaptation Plan 2022. 2014

⁹³⁶ Climate Change Act (609/2015) http://www.ym.fi/en-us/The_environment/Legislation_and_instructions/Climate_change_legislation

⁹³⁷ Country Study: Finland. The ANVIL project. June 2013 (p.7)

⁹³⁸ Peer Review Report Finland 2014 (p.12)

Table 2: Disaster Risk of Finland and of neighbouring countries according to the World Risk Index 2014

Overall Rank	Country	World risk index	Exposition	Vulnerability	Susceptibility	Lack of coping capabilities	Lack of adaptive capacities
1.	Vanuatu	36,50	63,66	57,34	36,40	81,16	54,45
128.	Russia	3,85	9,38	41,05	21,59	58,80	42,76
138.	Latvia	3,45	9,26	37,30	21,12	55,19	35,57
146.	Lithuania	3,01	8,88	33,91	18,58	49,36	33,78
156.	Estonia	2,43	7,23	33,57	18,67	51,15	30,89
158.	Norway	2,31	8,58	26,86	14,41	40,05	26,13
161.	Finland	2,24	8,19	27,38	15,60	39,39	27,17
162.	Sweden	2,19	7,97	27,49	15,39	40,90	26,18
171.	Qatar	0,08	0,28	30,30	8,97	44,76	37,16

Source: WorldRiskReport (WRR) 2014 by United Nations University - Institute for Environment and Human Security (UNU-EHS) <http://www.worldriskreport.com/>

Table 3: (Top 10) Natural Disasters in Finland for the period 1900 to 2014

Type of disaster		# of Events	Date	# of persons killed	# of persons affected	Damage (000 US\$)
Flood	General flood	1	25.05.2005	-	400	-
	ave. per event			-	400	-
Storm	Unspecified	2	both 25.01.1990	-	-	10000
	ave. per event			-	-	5000

Source: EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be - Université catholique de Louvain - Brussels - Belgium

1.1.2 Risk assessment approaches

Finland has adopted several approaches to risk assessment, driven by different aspects and objectives. Due to the low risk profile, the approaches preliminary doesn't aim on assessing risks for specific disasters, meaning what could *cause damage*, but focuses on what could *be damaged*, for whatever reason.

As a result, at the national level, the *Security Strategy for Society*⁹³⁹ (see 1.2) has adopted a risk assessment approach that is in the first instance based on the identification of the vital functions and their vulnerabilities of Finnish society that have to be secured in all situations.

*Threat scenarios*⁹⁴⁰ have been developed that could affect the vital functions for society. To these threat scenarios, a list of possible disturbances are correlated to improve prevention measurements and policies (see also 1.2).

To enhance the risk assessment in different areas, *risk zones* are defined for the whole country based on the national incident database as well as on vulnerability information derived from population density and the built environment. These data are aggregated through a high-technology GIS-based mapping of the country on a 1-km resolution grid. To each square kilometre is attached a risk probability correlated with a level of service which requires emergency first responders to be present in a certain time period.⁹⁴¹ The OIVA⁹⁴² Service of the SYKE provides data even with a resolution of 250x250 metres that can be e.g. used for land use planning⁹⁴³.

There are four risk zones, corresponding to 6-minute, 10-minute, 20-minute, or no-limit time periods. This technology-based and practical approach provides the regional rescue services (see chapter 3) with a *tool for capability planning*, required on a regional basis as requested by the Rescue Act (see chapters 2+5). The rescue authorities of the different regions carry out these assessments and update the status of the risk zones regularly.⁹⁴⁴

Between these approaches – threat scenarios to vital functions and the practical level of capability planning – methodologies for the quantitative assessment of significant national risks are in the process of being harmonized.⁹⁴⁵

In addition to these national and regional all-hazards risk assessments, several processes to assess specific risks are in place, i.e. with regard to flooding as already mentioned under 1.1.1 .

The 2014 Peer Review Report on Finland's implementation of the Hyugo Framework for Action evaluates the current risk assessment process as followed (p.6):

The risk assessment process in Finland would benefit from a more comprehensive approach and better coordination from the national to the local level. This should include improving the methodology for assessing large-scale risks nationally and the harmonisation of regional risk assessments. Flood risk assessment efforts should continue to map and characterise potential impacts of fluvial and urban floods, including water levels at the housing scale, so that prevention and emergency preparedness can be precisely tailored.

⁹³⁹ Ministry of Defence. *Security Strategy for Society*. Government Resolution 16.12.2010. Helsinki 2010

⁹⁴⁰ See list of definitions / the threat scenarios and their possible disturbances are listed in the Annexes of the *Security Strategy for Society* 2010 and are regularly updated

⁹⁴¹ Peer Review Report Finland 2014 (p.12)

⁹⁴² OIVA - the environmental and geographical information service for experts http://www.syke.fi/en-us/services/Environmental_information_data_systems

⁹⁴³ ,e.g. in the *Rural Development Programme for Mainland Finland 2014–2020*. Ministry of Agriculture and Forestry. 2014

⁹⁴⁴ Ministry of the Interior. *Country Report Finland*. 2004 (p.7 f)

⁹⁴⁵ Peer Review Report Finland 2014 (p.12)

1.1.3 International Cooperation with regard to risk assessment

Finland has a long history in cooperating with its neighbouring countries, i.e. among the Scandinavian Countries, around the Baltic Sea, the Arctic Area in various multi-national treaties and bilaterally with Russia (see also chapter 3.2.2).

An example is the cooperation of the meteorological services of the Nordic and Baltic region countries. Important projects have been the development of the European HIRLAM⁹⁴⁶ model (High Resolution Limited Area Model), the weather radar network for the Baltic Sea Region BALTRAD⁹⁴⁷ or the co-operation for the exchange and composition of timely weather radar data: the Weather Radar Network NORDRAD of the meteorological services of Sweden, Norway, Denmark, Estonia, Latvia and Finland.⁹⁴⁸

The cooperation of Nordic National Meteorological Services in the field of infrastructure is called NORDMET and was established in 1998. The idea of NORDMET is to achieve a better cost efficiency by sharing resources inter alia in the fields of observation, information management, product development as well as training and education. Next to NORDRAD, it lists several projects and working groups that can be related to risk assessment as well⁹⁴⁹.

Some examples:

- Working Group NORDSAT - concerned with satellite data and the operational use of these
- Nord MetNet - Co-operation in the Field of Nuclear Accidents
- NFCS Nordic Framework for Climate Services

There are also several cooperation agreements related to specific risks not restricted to meteorological services, such as the risk of a major shipping accident or oil spill accidents.

*One of the most important tasks of the Arctic Council is to monitor and assess the state of the environment in the region and to alert to any changes.*⁹⁵⁰

The 2014 Peer Review Report on Finland's implementation of the Hyugo Framework for Action describes the international cooperation in terms of risk assessment as followed:

There is a strong and historic cooperation among the Scandinavian countries as well as around the Baltic Sea with the Council of the Baltic Sea States. Joint monitoring and data sharing is effective through the common weather radar mosaic, produced together with Sweden and Norway. Trans-boundary rivers are also jointly monitored together with neighbouring countries.

⁹⁴⁶ European HIRLAM model <http://www.hirlam.org/>

⁹⁴⁷ Baltic Sea Region BALTRAD <http://baltrad.eu/>

⁹⁴⁸ Weather Radar Network NORDRAD <http://blog.fmi.fi/nordmet/node/21> or <http://www.smhi.se/en/weather/2.732/rainfall-radar>

⁹⁴⁹ NORDMET <http://blog.fmi.fi/nordmet/>

⁹⁵⁰ Prime Minister's Office. *Finland's Strategy for the Arctic Region 2013*. (p44)

Issues of specific concern related to the Baltic Sea such as the risk of a major shipping accident or pollution control are followed closely by the riverine countries and joint actions are conducted. To prevent pollution, for instance, there is a permanent airborne observation and regular contacts with the Russian authorities. The risk of nuclear accidents in neighbouring countries is also taken into consideration in the risk assessment.

At EU level, Finland is a participating country in the European Civil Protection Mechanism, which facilitates cooperation in civil protection between European countries in order to improve prevention, preparedness and response. The risk assessment being prepared by the Finnish authorities will contribute to the work being developed at EU level on risk assessment.

In addition, within the EU Strategy for the Baltic Sea Region, finalised at the end of 2013, Finland contributed actively to a project aiming at the development of scenarios and the identification of gaps for all main hazards in the Baltic Sea region.

On a regional basis, Finland participates in the Baltic Marine Environment Protection Commission, which regularly develops joint risk assessments of the Baltic Sea environment and plans for measures to respond to major maritime incidents. Finland cooperates also with the other Nordic countries within the framework of the Council of the Baltic Sea States (the civil protection network coordinates joint measures in the field of civil protection, critical infrastructure protection and emergency preparedness issues), the Barents Euro-Arctic Council (joint committee on rescue cooperation) and the Arctic Council (emergency prevention, preparedness and response working group).

One example for the international cooperation in risk assessment and monitoring is the Baltic Marine Environment Protection Commission – HELCOM, which is the governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, known as the Helsinki Convention to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation⁹⁵¹. HELCOM has developed a Monitoring and Assessment Strategy which is translated in a Monitoring and Assessment System (see Fig. 1). Part of the monitoring is the Automatic Identification System (AIS) which monitors the maritime traffic with special regard to oil tankers, in the Baltic Sea with land based stations, enabling the Baltic as the first region in the world to monitor maritime traffic in real-time since 2005.⁹⁵² Status 2016 of course, except for a few not identified ships sometimes, marine traffic is monitored worldwide close to real-time⁹⁵³.

⁹⁵¹ More information at www.helcom.fi and www.environment.fi/oil

⁹⁵² AIS and e-navigation <http://www.helcom.fi/action-areas/shipping/ais-and-e-navigation>

⁹⁵³ <http://www.marinetraffic.com>

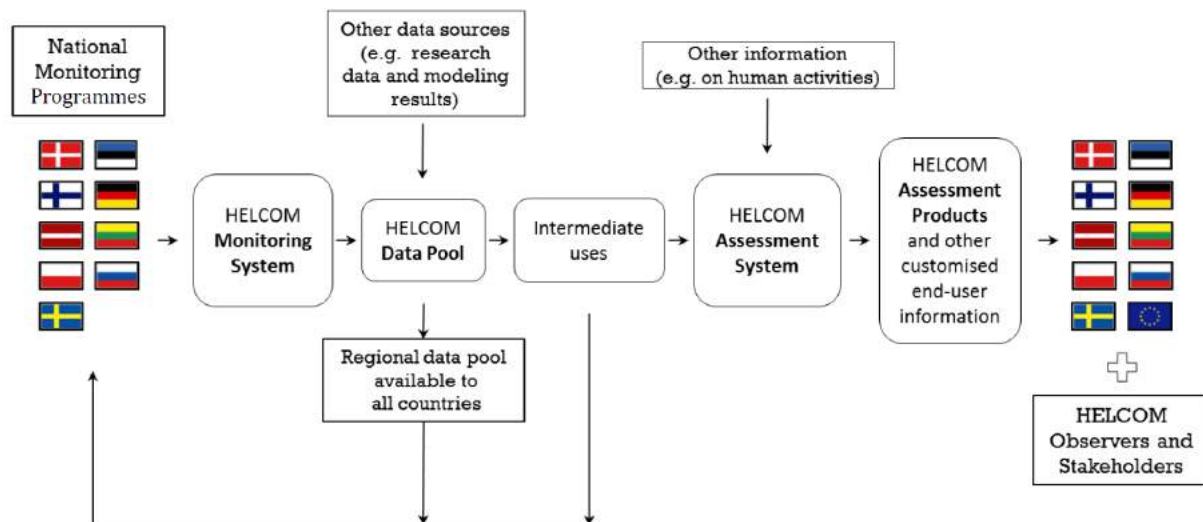


Figure 7: Flow-chart of the HELCOM Monitoring and Assessment System described in the HELCOM Monitoring and Assessment Strategy

Source: HELCOM Monitoring and Assessment Strategy⁹⁵⁴

1.2 Policy and Governance

The objective of the Finnish Government is to make Finland the safest country with the most effective rescue services in Europe, as highlighted in the “*Security Strategy for Society*”⁹⁵⁵ adopted in 2010. This ambition is reflected in a comprehensive legal and policy framework for disaster risk reduction, which has been significantly renewed over the last years and is constantly improved.

The Finnish disaster risk management policy is clearly set out in a number of key documents, including the Security Strategy for Society, the Finnish Security and Defence Policy Report and the Internal Security Programme.

Policy making in context of disaster risk reduction is done on the national level, following the mentioned Security Strategy for Society. Disaster preparedness is implemented at all levels of society. All administrative sectors are obligated to draw up preparedness plans and maintain preparedness in case of emergency conditions or disturbances in normal conditions. Responsibility lies with the authorities, to which the duties are assigned by law, following *a concept of competent authorities*, meaning that tasks are distributed based on substantial expertise and competences of each authority.

Another rule is the *principle of strict legality in the administration*. *Horizontally, every sector has rather independent powers in decision making, and also vertically the possibilities of upper administrative levels to lead directly over the lower levels are restricted by law.*⁹⁵⁶

The homepage⁹⁵⁷ of the Security Strategy for Society states:

⁹⁵⁴ <http://www.helcom.fi/Documents/Action%20areas/Monitoring%20and%20assessment/Monitoring%20and%20assessment%20strategy/Monitoring%20and%20assessment%20strategy.pdf>

⁹⁵⁵ Ministry of Defence. *Security Strategy for Society*. Government Resolution 16.12.2010. Helsinki 2010

⁹⁵⁶ Country Study: Finland. The ANVIL project. June 2013 (p.3)

⁹⁵⁷ MoD - Secretariat for Defence Committee / Security in Society <http://www.yhteiskunnanturvallisuus.fi/en/>

The functions vital to society must be secured in all times: in normal conditions as well as in crises. In the security strategy for society the vital functions form the basis for preparedness. The following are regarded as vital functions:

- Management of Government affairs
- International activity
- Finland's defence capability
- Internal security
- Functioning of the economy and infrastructure
- The population's income security and capability to function
- Psychological crisis tolerance

All actors in society – authorities, companies, organisations and communities involved in security studies – play an important role in securing these functions.

The Security Strategy for Society lists 49 strategic tasks clustered under the above mentioned seven vital functions for society, which aim to secure these vital functions in case of disturbances⁹⁵⁸ and assigns responsibilities to diverse Ministries (the competent authority) for each of these tasks, relevant to their own sphere of operation. (see table 3). Thus, many ministries are involved in the Security Strategy. Tasks related to disaster risk reduction e.g. are under the responsibilities of the Ministry of the Interior for emergency preparedness and response; the Ministry of Agriculture and Forestry together with the Ministry of the Environment is responsible for prevention of floods and droughts; and Ministry of Finance and other sectorial ministries, for business continuity.

Possible disturbances to these tasks and thus, to vital functions have currently (status 2010) been identified and are clustered in 13 threats scenarios⁹⁵⁹ as described on the homepage of the policy⁹⁶⁰:

Threat models have been compiled as the basis of preparedness for the security strategy for society. They are descriptions of situations that may endanger security in society and its vital functions. (the 13) Threat models consist of the following:

- a serious failure of the power supply
- serious disruptions to telecommunications and information systems
- serious disruptions to logistics
- serious disturbances in the community infrastructure
- a serious disruption to food supply
- serious disturbances in the finance and payments system
- failing access to public finances funding
- a serious disturbance in the public health and well-being

⁹⁵⁸ see List of Definitions

⁹⁵⁹ see List of Definitions

⁹⁶⁰ Security in Society – Threats <http://www.yhteiskunnanturvallisuus.fi/en/threats>

- major accidents, extreme weather conditions and environmental threats
- terrorism and other type of crime posing a threat to society
- serious disturbances in border management
- political, financial and military pressure, and
- the use of military force (see also 3.1).

The authorities, organisations and companies can plan their preparedness by adapting the threat models to their own operating environment. For example, in many municipalities a preparedness plan has been drafted on the basis of the Security strategy for society.

This **all-hazards and threats and whole-of-government approach** provides a uniform basis for strategic preparedness to all Finnish institutions from the national level to municipalities, as well as to private sector organisations and NGOs. It is complemented by a number of decisions, strategies and guidelines related to preparedness and crisis management, issued by the Government and different administrative sectors.

The **Prime Minister's Office** also maintains capacities for crisis management (see chapter 3). **National technical agencies**, such as the Finnish Meteorological Institute (FMI), Finnish Environment Institute (SYKE), Emergency Response Centre Administration and National Emergency Supply Agency (NESA), have specialised mandates for hazard monitoring and mapping, and early warning – or to ensure supplies availability, respectively (see 1.2.2 and 4.4).

At the local level, the 320 **municipalities** have a mandatory responsibility to provide welfare as well as rescue services for their citizens. In this **strongly decentralized political system**, municipalities can regroup themselves at the regional level to manage these services with varying administrative borderlines depending on the policy domain.

There are currently 22 **rescue regions** in Finland (see chapter 3), where rescue services organise their operations. As part of the Government's structural policy programme, the aim is to reduce the number to 11⁹⁶¹. While they are under the responsibility of local authorities, the rescue services have to follow guidelines and regulations from the **Ministry of the Interior**, operated by the **Department for Rescue Services**, which oversees their coverage and the quality of services in the rescue regions.

Since a **2010 reform**, Finland has a more streamlined regional state administration to control and regulate policy implementation at the local level in areas related to disaster risk reduction, such as environment, land use or safety. The reorganisation of the administrations may continue in the future with on-going reforms to reduce the number of municipalities. Finally, the specificity of the Åland Islands autonomous region makes its risk management policy rather independent from that of the central government.

⁹⁶¹ Finland's legal preparedness for international disaster response - Finnish Red Cross 2014.(footnote p.30)

Table 4: 49 Strategic tasks which are central to securing society's vital functions and the ministry responsible for the development of each strategic task

STRATEGIC TASK	RESPONSIBLE MINISTRY
<i>Management of Government affairs</i>	
Guaranteeing the proper functioning of the Government	PMO
Finland's activities in the European Union and securing the national preparation and handling of EU matters	PMO
Functioning of Government communications	PMO
Maintenance of the Government's situation picture	PMO
Securing the rule of law	MoJ
Holding elections	MoJ
<i>International activity</i>	
Maintaining contacts to foreign states and key international actors	MFA
Protecting and assisting abroad Finnish citizens and those residing in Finland on a permanent basis	MFA
Securing Finland's foreign trade	MFA
Comprehensive crisis management	MFA
International military crisis management	MoD
International civilian crisis management	MoI
International disaster response	MoI
<i>Finland's defence capability</i>	
Finland's military defence	MoD
Supporting the other authorities	MoD
<i>Internal security</i>	
Guaranteeing protection under the law	MoJ
Public order and security	MoI
Emergency services and maritime search and rescue	MoI
Flood risk management and dam safety	MoAF
Emergency response functions	MoI
Oil and chemical spill response on land and water	MoE
Border management	MoI
Immigration control	MoI
The management of a major influx of asylum seekers	MoI
<i>Functioning of the economy and infrastructure</i>	
Acquiring and allocating financial resources	MoF
The financial system and money management	MoF

STRATEGIC TASK	RESPONSIBLE MINISTRY
Safeguarding the insurance services	MoSAH
Securing the fuel supply	MoEE
Safeguarding the electric power supply	MoEE
Safeguarding the electronic ICT systems	MoTC
Safeguarding the state administration's IT functions and information security and the service systems common to the state administration	MoF
Supporting the construction and maintenance of warning and alert systems	MoTC
Safeguarding the continuation of transports	MoTC
Safeguarding the primary production of food supply	MoAF
Safeguarding the water supply	MoAF
Safeguarding food processing and distribution	MoEE
Safeguarding critical industries and services	MoEE
Guaranteeing housing	MoE
Securing a sufficient labour workforce	MoEE
Maintaining the education and research system	MoEC
Detecting, controlling and adapting to changes in the environment	MoE
Waste management	MoE
<i>The population's income security and capability to function</i>	
Income security	MoSAH
Securing the social and health care services and environmental health care services	MoSAH
Guaranteeing the availability of medical supplies and equipment	MoSAH
The detection, surveillance and management systems for health risks	MoSAH
<i>Psychological resilience to crisis</i>	
Education	MoEC
Strengthening cultural identity and protecting cultural heritage	MoEC
Securing religious services	MoEC

Source: "Security Strategy for Society", Government Resolution 16.12.2010, Finnish Ministry of Defense.

1.2.1 Strategy scope and focus

As described in section 1.1, Finland is a country with a very low risk profile in terms of natural and man-made-disasters with nearly no experience in major disasters. Considering the all-hazard approach of the Finish crisis management system which focuses on up-keeping the vital functions of

society in all situations, one can say that the strategy focus is on preparedness and prevention rather than on response and recovery.

1.2.2 Monitoring and analytical support to policy making; R&D

Data on key hazards and vulnerabilities are monitored, archived and disseminated by various ministries and technical agencies in Finland depending on the hazard characteristics, to better assess the risks of disturbances and threats.

Regarding hazard monitoring, Finland is equipped with efficient modern and high-tech monitoring networks, operated by its technical agencies. The **Finnish Meteorological Institute (FMI)** is responsible for real-time 24/7 monitoring, achieving and disseminating data associated with weather and marine events. The **Finnish Environment Institute (SYKE)** monitors water levels and discharges in rivers and lakes. There are also 288 stations continuously measuring radiation in the environment operated by the **Radiation and Nuclear Safety Authority (STUK)**. When needed, specific monitoring and surveillance processes can be activated by Ministries. For instance, the Ministry of the Interior organises air patrolling on behalf of the 22 rescue services (see chapter 3) to detect forest fires from the air during periods of dry conditions, while the Ministry of Agriculture has agreed on an action plan with the National Land Survey, FMI and SYKE for taking and processing rapid aerial photos in case of natural events and disasters, such as storms and floods. *Space technology* is also used in Finland for forest-fire detection as well as for situation assessment after disasters.

Loss-data collection is operated by the Ministry of the Interior via the national incident database. In addition, the Finnish Environment Institute collects flood loss-data from municipalities. *Insurance companies* have also developed their own database.

See also chapter 1.1.3 for international cooperation in monitoring.

1.2.3 Policy for Prevention

Finland's policy approach of crisis management doesn't differ between prevention, preparedness, response and relief & recovery, though the focus is on preparedness, as mentioned before. As mentioned under 1.2 and 1.2.1, each "competent authority" at all levels is responsible for ensuring the maintenance of vital functions for society within their duties. This covers all aspects of prevention, preparedness, response, relief and recovery.

If the Finnish approach should still be separated into different phases, it would according to the Country Report Finland 2004⁹⁶² be prevention, early warning measures and effective response, each one using the following three methods: legislation, technical solutions and education.

1.2.4 Policy for Preparedness

See 1.2.3

⁹⁶² Ministry of the Interior. *Country Report Finland*. 2004 (p.3)

1.2.5 Policy for Response

See 1.2.3

1.2.6 Policy for Relief and Recovery

See 1.2.3

1.3 Financing

1.3.1 Investing in preparedness

Disaster risk reduction resources according to the 2014 Peer Review Report on the Implementation of the HFA:

Funding for risk management comes from different sources such as Government budget, municipalities' budget and specific financial mechanisms. As in most other European and OECD countries, Finland has not made a comprehensive estimation of the resources spent on disaster risk reduction from the national to the local level.

At the national level, resources for risk management are in fact embedded in the general budget of each responsible ministerial department, as well as for technical agencies. The specific funding mechanism of the National Emergency Supply Agency (NESA), financed by consumption through VAT, secures its large budget. It is aimed at guaranteeing the availability of all forms of supplies to ensure business continuity in all sectors. Citizens also contribute through the fire tax, which adds to the fire prevention fund (€9 million per year).

(The Fire Protection Fund, managed and supervised by the Ministry of the Interior, is a fund outside the State Budget. Every year, the Fund grants nearly EUR 10 million for projects that are designed to improve fire prevention and rescue operations. This assistance has focused on training and education provided by rescue service organisations, research and development projects supporting the work in the field, procurement of equipment and building of fire stations.)⁹⁶³

Developers contribute by financing shelters in all new buildings (€39 million per year). Overall, resources from the national budget appear to have covered well the funding needs to ensure the proper implementation of national strategies in risk management, as in other areas of public policy.

As further fiscal consolidation may be needed in the medium term to tackle new economic challenges, Finland may face competing demands for public funding in the future, requiring risk management activities to demonstrate further their cost-effectiveness.

⁹⁶³ Ministry of the Interior - Department for Rescue Services. *Rescue services in Finland*. 2013

This contraction in resources is particularly important at the local level. Municipalities are the principal contributors to the budgets of regional rescue services, estimated at a total of €385 million. They have a strong independence from central government to decide their budget allocations, with 50 per cent of their budgets coming from local taxation. In the current context, where many municipalities are facing budgetary difficulties, ensuring that rescue services have the same level of preparedness at the local level could become more challenging, especially when it comes to persuading politicians to make it a priority given the country's low risk profile. The on-going reforms of local government, which propose incentives to merge municipalities, as well as those of the social and healthcare system and of the rescue services, are forward looking initiatives aimed at addressing this budgetary challenge for risk management. Plans to reduce the number of rescue regions were considered as part of this process, but were not agreed upon because of the political, social and economic costs involved in such reform.

1.3.2 Investing in consequence management

Finland's Peer Review Report 2014 on "Financial reserves and contingency mechanisms" regarding consequence management (p.25):

Several public financial instruments and contingency mechanisms are available in Finland in case of disasters. They are currently facing significant evolutions with the on-going structural reforms in the country.

*The **national Recovery Fund**, managed by the Ministry of Finance, can support municipalities in case damages to public infrastructure exceed their own budgets. The Ministry of the Environment also manages the **Finnish Oil Pollution Compensation Fund**⁹⁶⁴, which is available to compensate damages caused by oil spills and associated emergency and de-pollution costs when the cause of the incident is unknown or the culpable party is unable to pay the compensation in question. The compensation granted from the fund must be repaid by the party that caused the oil spill, or by another responsible party.*

*The **State** may also contribute to maintaining preparedness for emergency health care and major accidents by providing state funding towards contingency activities where special reasons make this expedient. The Red Cross also manages a **Disaster Relief Fund** with non-earmarked funding.*

The major evolution in the public compensation approach relates to flood disasters: due to budget restraints, the system for flood damages compensation through governmental funds was replaced in 2014 by a new private-insurance-based system. Under the new scheme, private insurance companies will provide damage compensation for all types of floods, including urban pluvial floods.

⁹⁶⁴ Finnish Oil Pollution Compensation Fund
http://www.ym.fi/en-US/The_environment/Finnish_Oil_Pollution_Fund

However, this will apply only to floods above a pre-defined threshold, defined with the regulating authorities. Flood insurance is now included in a package with home insurance, with no increase to insurance premiums (at the start of policies, at least). After a few years, it is expected that premiums will be recalculated to eventually reflect the risk level. Ministry of Finance statistics show that domestic premiums amount so far to a total of €4.1 billion. However, according to SYKE's analysis the scale of the economic impact of flooding is rather limited, with maximum damages in even high-risk areas estimated at only around €10 million – compared with the €100 million damages caused by the 2011 winter storms. Insurance companies will use the flood-risk maps prepared during implementation of the EU Floods Directive. In the future, time and experience from incidents will provide the best indication of how this policy change will impact and be perceived by Finnish citizens and businesses.

Assistance from the **EU Solidarity Fund** may of course be requested in cases of major disasters, but since to be eligible for funding, the total direct damage caused by the disaster must exceed 3 billion euros or 0.6% of the country's gross national income, Finland hasn't make use of it so far.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

As mentioned before, Finland has not experienced major disasters in its recent history, and thus no concrete examples of, or dedicated policies for, recovery and reconstruction have been developed that specifically include risk reduction measures. Nevertheless, the drive to strengthen the resilience of critical infrastructure is constant, also stressed by the objectives of the Security Strategy for Society. As an example, measures are taken to secure the power networks and reduce the risk of power failures in the repair and rebuilding of local electricity networks that has been damaged due to wind or snow storms⁹⁶⁵.

1.4.2 Departmental Lessons Learned systems

Each “competent authority” at all levels is responsible for recording and analysing all management measures that have been taken when disturbances occur in Finland or abroad, as requested by the Security Strategy for Society. (see also 1.4.5)

Furthermore, as stated e.g. in Finland's Cyber Security Strategy⁹⁶⁶,

different sectors' preparedness in securing the vital functions in disturbed conditions will be improved by organising regular exercises. Each actor will develop its national and international participation in exercises. The actors will improve the utilisation of best practices and lessons-learned accrued through international exercises by improving the exchange of information and mutual coordination. The goal of exercises is to enhance the participants' chances of exposing the vulnerabilities of their own actions and systems, in developing their capabilities and training their personnel.

⁹⁶⁵ Peer Review Report Finland 2014

⁹⁶⁶ Finland's Cyber Security Strategy. Government Resolution 24.1.2013.

Since this is also in general requested by the Security Strategy for Society, it is applicable to all “competent authorities” at all levels.

1.4.3 Centralised (national) Lessons Learned system

In addition to organisations internal lessons learned processes, there is also a lot of exchange on inter-agency or inter-sectoral level at national as well as on international level. Moreover, at national level,

*the **Finnish accident data-base** provides a good basis for post-event reviews as it records all interventions and actions which are taken in responding to an emergency or disaster. The **Safety Investigation Authority** of Finland, previously known as the Accident Investigation Board, investigates all major accidents, regardless of their nature. Investigation reports are prepared for each case and include recommendations for improving systems and processes. ‘Lessons learnt’ exercises were conducted following the 2010 storms, which led to improving pre-warning processes – especially of citizens – and emergency preparedness.*

In the past, lessons have also been drawn from international disasters such as the 2004 tsunami. This has helped improve inter-agency coordination and joint operation capacity for response outside Finnish borders.⁹⁶⁷

1.4.4 International exchange for Lessons Learned

International exchange of information as well as common exercises with regard to disaster preparedness and response are fostered by the Security Strategy for Society, as stated under 1.4.2.

Finland actively participates, especially, in the work of the EU and NATO, which also leads, inter alia, to the improvement of the national evaluation processes.

In addition, there is a close cooperation with neighboring countries in terms of CM, correlated with several bi- and multilateral agreements, Finland as a nation is part of as well as single authorities. Even on municipality-level, cross-border agreements exist (for international cooperation, see 3.2).

1.4.5 Regular policy reviews

Requested by the Security Strategy for Society (2010), the national policy review is conducted by monitoring the implementation of its strategy, which is to be based on at least the following entities:

- ministry reports and assessments on how their strategic tasks have been taken into account in the administrative sector’s preparedness and the capabilities to manage a disturbance
- compiling and analysing the lessons learned from having managed disturbances
- assessments on the functioning and development needs of the security of supply

⁹⁶⁷ Peer Review Report Finland 2014.

- arrangements in their administrative sector, and
- experiences from the preparedness exercises of administrative sectors, the Government and the authorities nation-wide

According to the Security Strategy for Society,

the monitoring of the Strategy's implementation also produces grounds for security research in administrative sectors and also for national co-operation in the field of security research. National and international security research is conducted and forms of cooperation are developed through the strategy for national security research; the Advisory Board for Sectoral Research is in charge of the strategy's implementation. Furthermore, the Scientific Advisory Board for Defence (MATINE), the security programme of the Finnish Funding Agency for Technology and Innovation (TEKES), the EU's framework programme for security research and the technology programmes and excellence networks of the Defence Forces produce research to support the Security Strategy.

On the international level, Finland volunteered, as a second country, after United Kingdom, for the evaluation through a Peer Review Process with regard to the implementation of the Hyogo Framework for Action (HFA) and its related priorities into the national crisis management concept⁹⁶⁸. As a result, Finland benefits from the feedback of high-level experts from the EU Commission (DG Humanitarian Aid and Civil Protection (ECHO)), the UN office for disaster risk reduction (UNISDR) and the Organisation for Economic Co-operation and Development (OECD).

Objectives of the Peer Review Process are:

- enhance the effective implementation of and reporting on the HFA, contributing to improved policy-making on disaster risk reduction through external assessment and mutual learning;
- increase the consistency between the national disaster risk reduction policies and stimulate transferability of good and innovative practices;
- contribute to developing and implementing EU policy initiatives in disaster risk management in EU Member States as well as in neighbouring countries;
- encourage awareness-raising through broad involvement of stakeholders in the review process and wide dissemination of the results;
- foster policy dialogue in Europe and enhance regional cooperation between countries exposed to common hazards and risks

The development in the respective Progress Reports on the Implementation of the Hyogo Framework for Action⁹⁶⁹ shows that the quite young strategy is still in the implementation phase in all levels and thus provides several examples for the realization of recommendations/implementation of the results of policy and strategy reviews.

⁹⁶⁸ Peer Review Report Finland 2014.

⁹⁶⁹ Ministry of the Interior: National progress report(s) on the implementation of the Hyogo Framework for Action, 2012 (2009-2011), 2013 (2011-2013), 2014 (2013-2015, interim)

1.5 Resilience

Since Finland's policy and strategy approaches in terms of CM have all been renewed or reviewed in recent years, the concept of resilience as understood today by academics or within the European Union, is widely implemented. Increasing Europe's resilience to crises and disasters is one of the five strategic objectives in the 2010 Security Strategy for Society.

Even specific aspects of resilience are emphasised in the general policy: strengthening psychological resilience is listed as a separate strategic task in the Security Strategy for Society under the responsibility of the Ministry of Education (see table 3). Psychological resilience to crisis is for instance part of the instructions on crisis communication of the Prime Minister's Office⁹⁷⁰.

1.6 Information sharing and data protection

Data sharing and dissemination is very effective in Finland as it follows an open-data policy: all data paid for through public budget can be accessed by Finnish citizens.

This means that the Ministry of the Interior, the Emergency Response Centre Administration, the Finnish Meteorological Institute (FMI) and the Finnish Environment Institute (SYKE) – and also other actors – are relevant owners of data, and are open to data sharing.

The Emergency Response Centre Administration, for instance, shares its data on accidents with a number of other organisations, such as FMI or SYKE, and receives data from them free-of-charge. FMI and SYKE will further this policy of data exchange by establishing a joint flood centre. There seem to be no obstacles in the national data-sharing policy which could hamper disaster risk reduction. The energy sector also uses FMI databases on frequencies and impacts of storms. Similarly, cooperation with the insurance sector to share loss data has facilitated the development of flood risk assessment. At the regional level, weather radar data sharing among the Scandinavian countries brings benefits to each of them by improving monitoring at a lower cost⁹⁷¹.

As a result of high-level contingency planning and the need to secure official data flows and data security, both during peacetime and crises, the *safety network project TUVE* has been set up with the aim to implement a Government Security Network in 2013⁹⁷². Upon a government decision in 2011 TUVE's management, maintenance and development will gradually be transferred after the construction phase to State Security Networks Ltd., the same operator who runs the VIRVE radio network for the rescue authorities (see 4.4).

⁹⁷⁰ Central Government Communications in Incidents and Emergencies. Prime Minister's Office 03/2013

⁹⁷¹ Peer Review Report Finland 2014.

⁹⁷² Ministry of the Interior: *National Platform for Disaster Risk Reduction*. Ministry of the Interior publication 14/2012

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The VADEMECUM platform⁹⁷³ summarizes the concept as followed:

Each authority is responsible for its statutory functions not only during peacetime, but also during crises such as serious international disturbances, the threat of an armed attack, war, post-war situations, economic crises and disasters. To prepare for emergencies, authorities are obligated by law to take precautionary measures such as making contingency plans, acquiring special equipment and training personnel.

In principle, the same or similar emergency plans apply to the civil administration during both wartime and peacetime civil emergencies.

One guiding principle of the Civil Emergency Planning (CEP) is that each authority continues with its normal functions also during a state of crisis. However, in such a case, authorities can assume specific additional responsibilities related to their normal functions. Another principle is that as few new bodies as possible are introduced into civil administration in case of a crisis.

Organisational changes are kept to a minimum. In addition to authorities, governmental bodies, companies and institutions are to continue with their peacetime functions. Authorities are expected to allocate the necessary funds for emergency planning and other preparatory measures in their annual budgets.

See also chapter 1.2

2.2 General crisis (emergency, disaster) management law

Naturally, the underlying law in Finland is the Constitution of the country, which prescribes the grounds for expanding the authorities' powers in case of emergency conditions. Disaster preparedness in society is based on powers of authority in normal conditions, and special powers of authority to be issued in emergency conditions are based on these.

With regard to the so called crisis legislation, the **Emergency Powers/Readiness or Preparedness Act** has been updated 2011 and aims to guarantee the nation's livelihood and the national economy, maintain law and order, protect the basic rights of citizens and safeguard the territorial integrity and independence of the nation in extraordinary situations by regulating authority powers in emergency conditions. It could be applied before or beside the **State of Defence Act** of 1991, which gives additional powers for the government in the defence against an armed aggression.

⁹⁷³ VADEMECUM: Finland - Emergency planning

http://ec.europa.eu/echo/files/civil_protection/vademecum/fi/2-fi-2.html#cipro

The Finnish **Rescue Act**, which is the country's basic law for disaster management, requires not only the rescue services but also various other stakeholders, including other state agencies and the private sector, to undertake specific disaster risk management actions. The Act, also amended in 2011, covers prevention, preparedness and response and lays down, among other things, the tasks of rescue services and the administration and the powers of rescue authorities from national to local levels. Thus, the Rescue act is the key general act regulating functions during disturbance in normal conditions, where the situation in question is not a crisis pertained to in the Emergency Powers Act (see also 2.3)⁹⁷⁴.

The rescue service authorities have broad jurisdiction, as stated in the Red Cross's report on legal preparedness for international disaster response (2014, p.27):

According to Section 36 of the Rescue Act, regional rescue authorities and the rescue authorities of the Ministry of the Interior have the right to "order people to protect themselves and evacuate people and property; take any such necessary action that may cause damage to immovable or movable property; order that buildings, communications links and equipment, as well as equipment, supplies, foodstuffs, fuel and lubricants and extinguishing agents required in rescue operations shall be made available; take any other action as required by rescue operations". In addition to rescue service authorities, the police have the right to order people to provide assistance in rescue operations.

There are several other acts / laws related to crisis management in Finland, e.g. translations of the national policies into legislation, such as the Climate Change Act (609/2015)⁹⁷⁵. Please see also the chapter Resources for the list of acts with regard to relevant legislation according to the Finnish Red Cross's report on legal preparedness.⁹⁷⁶

2.3 Emergency rule

The Finnish Red Cross's report on legal preparedness for international disaster response 2014 (p.24) summarizes the criteria for emergency conditions as followed:

*The application of the provisions of the **Emergency Powers Act** requires that the Government and the President confirm that the criteria for emergency conditions are met and a Government Decree on using the emergency powers is issued. The Decree must immediately be submitted to Parliament for approval. Emergency powers must be specified accurately and realistically.*

According to Section 3 of the Emergency Powers Act, emergency conditions include military conflicts, particularly serious incidents or threats to the livelihood of the population or the foundations of the national economy that put at risk the functions vital to society, particularly serious catastrophes and their aftermath, and dangerous communicable diseases that have

⁹⁷⁴ Finland's legal preparedness for international disaster response - Finnish Red Cross 2014.

⁹⁷⁵ Ministry of the Environment http://www.ym.fi/en-us/The_environment/Legislation_and_instructions/Climate_change_legislation

⁹⁷⁶ For available translations of the respective acts, please check <http://www.finlex.fi/en/laki/kaannokset/>

spread extremely widely and are similar in their effects to particularly serious catastrophes. Emergency powers can only be used if the situation cannot be controlled through the normal powers of authority. If the situation in question is not a crisis pertained to in the Emergency Powers Act, but a disturbance in normal conditions, the authorities shall operate in accordance with the normal legislation, decrees and preparedness plans along with other official arrangements.

The scope of decision-making or emergency powers during emergency conditions is wide, encompassing large parts of the economy (including for example price controls and the distribution of goods), the organisation of public administration, the postponement of local elections and the transfer of municipal powers, compulsory labour, the confiscation of goods, a duty to submit information to the government, etc. Nevertheless, government decisions on such issues must be put to parliament⁹⁷⁷.

According to the Emergency Powers act, exceptions to basic rights and personal liberties can only be made in terms of use of labour of Finnish residents. However, exceptions to international human rights obligations cannot be made under any circumstances.⁹⁷⁸

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

A real specificity of Finland is the *Security of Supply Act*, which aims to safeguard all economic activities that are necessary for maintaining the population's livelihood, the country's economy and national defence during a crisis, having resulted in the creation of a related public-private partnership and of the National Emergency Supply Agency (NESA) (see also 3.1).

Other important legislative acts referring to disaster risk reduction include the *Land Use and Building Act*, the *Environmental Protection Act*, which aim to reduce the underlying risk factors, or specific arrangements like the *Dam Safety Act 2009* or the *Government Decree on Emergency Response Arrangements at Nuclear Power Plants 2008*.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Because municipalities for the most part have the responsibility for organising basic services and other functions vital to society, their role in local administration is central. The Finnish Red Cross's report on legal preparedness for international disaster response 2014 summarizes the regulations on the local/regional levels as followed (p.14-15):

The local administration contains the municipalities, whose administration shall be based on the self-government of their residents, in accordance with Section 121 of the Constitution.

⁹⁷⁷ Khakee, Anna. *Securing Democracy? A Comparative Analysis of Emergency Powers in Europe*. Geneva Centre for the Democratic Control of Armed Forces (DCAF). Policy Paper – №30

⁹⁷⁸ Finland's legal preparedness for international disaster response - Finnish Red Cross 2014.

Provisions on the general principles governing municipal administration and the duties of the municipalities are laid down in legislation. The municipalities have the right to levy municipal tax in order to cover costs incurred, and to manage their tasks. There are 320 municipalities in Finland. They hold a significant responsibility for providing basic services and organising other vital operations in society. The public administration also contains the church administration and indirect public administration. The region of Åland is autonomous in accordance with the provisions of the Act on the Autonomy of Åland.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

According to the Finnish Red Cross's report on legal preparedness for international disaster response 2014 (p.30-31),

a large number of companies, associations and voluntary organisations participate in public administration. Private service providers play an increasingly significant role in the maintenance of the basic services in society. As a member of the European Union, Finland is committed to the principles of free competition and the freedom to provide services, as well as the related EU legislation.

According to Section 51 of the Rescue Act, voluntary organisations and persons may be used to assist in the training, advisory and educational duties of rescue services and in rescue operations; they may not, however, be used in duties that involve a substantial use of public authority, such as the use of official powers or inspection. The authorities assigned by law are always ultimately responsible for statutory duties. The police can use members of voluntary organisations in carrying out search operations and other assistance tasks that do not involve the substantial exercise of official authority. The Finnish Red Cross is an organisation whose foundation and activities are governed by public law.

*The **Volunteer Rescue Service (Vapepa)** is an association of 50 organisations. Its purpose is to support the authorities, particularly in operations requiring a large number of rescue personnel. If requested, Vapepa works in collaboration with the authorities, supporting and complementing them. Its organisations have a number of agreements on both the local and the national levels with the police, rescue authorities and social welfare and health authorities. Voluntary rescue services in general are coordinated by the Finnish Red Cross. The Finnish Lifeboat Institution coordinates voluntary sea rescue services, and the Finnish Air Rescue Society coordinates voluntary air rescue services.*

2.7 Legal regulations for international engagements of first responders and crisis managers

International engagements of Finish first responders abroad are regulated by the Act on the Participation of Civilian Personnel in Crisis Management (1287/2004).

According to this act (chapter 2, section 5(1)),

A person participating in crisis management abroad has a fixed-term employment relationship, governed by public law, with the State, which is represented as an employer by the Ministry of the Interior. The State as an employer is, however, represented by the Ministry for Foreign Affairs, if foreign and security policy considerations warrant it.

With regard to rights and obligations of persons in employment relationships in chapter 2, the act further gives information on:

- Leave of absence and continuation of an employment or civil service relationship
- Holiday compensation
- Family leave and sick leave
- Group life insurance
- Pension rights
- General retirement age
- Basic salary
- Compensation for conditions
- Compensation for certain costs
- Termination of employment relationships

3 Organisation

3.1 Organisational chart

In Finland, disaster preparedness is implemented at all levels of society. All administrative sectors are obligated to draw up preparedness plans and maintain preparedness in case of emergency conditions or disturbances in normal conditions. The administrative system in Finland is based on the **principle of strong mutual trust**: the authorities trust and comply with decisions made by other authorities within their jurisdiction. The authorities support one another and collaborate. Responsibility lies with the authorities to which the duties are assigned by law⁹⁷⁹ (see also chapter 1 & 2).

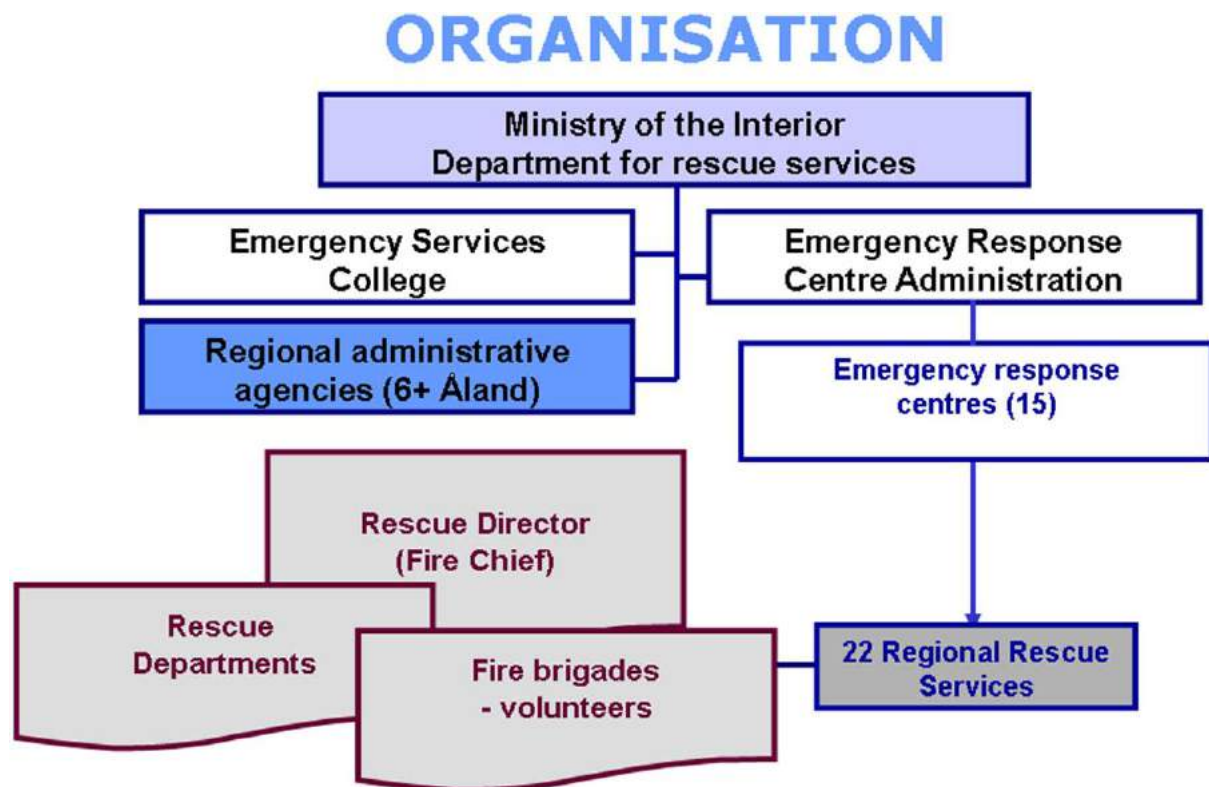


Figure 8: Organisational Chart of the Crisis Management Structure of Finland
Source: http://ec.europa.eu/echo/files/civil_protection/vademecum/fi/2-fi-1.html

Finland has established a strong and comprehensive disaster management system which at present remains highly decentralized.

At national level, the **Prime Minister's office** is responsible for the coordination of crisis management. The Permanent Secretaries of the ministries are responsible for securing the functions of their respective administrative branches in a state of emergency as provided for in the Security Strategy for Society. A committee of the **Heads of Preparedness** of all ministries can be convened in case of a crisis.

The **Ministry of the Interior's Department for Rescue Services** has been appointed the **National Coordinator** for the implementation of the Hyogo Framework for Action. The task of the National

⁹⁷⁹ Finland's legal preparedness for international disaster response - Finnish Red Cross 2014 (p.25)

Coordinator is to report to the United Nations on the results of work to prevent disasters caused by natural hazards and mitigate their damage.

The *Finnish Cooperation Network* was appointed on 7 May 2010 to act as a cooperation body and to prepare a **National Platform for Disaster Risk Reduction**. The Cooperation Network consists of a *steering committee* and an *expert committee*, whose tasks are specified in the letter of appointment and does not have independent competences.

The aim of the Cooperation Network is to clarify the overall picture of preparedness for natural disasters and to identify areas that require further action or development. The National Platform aims also to monitor the progress in each issue. In addition, the Cooperation Network aims to find issues for which there is a clear need for development.⁹⁸⁰

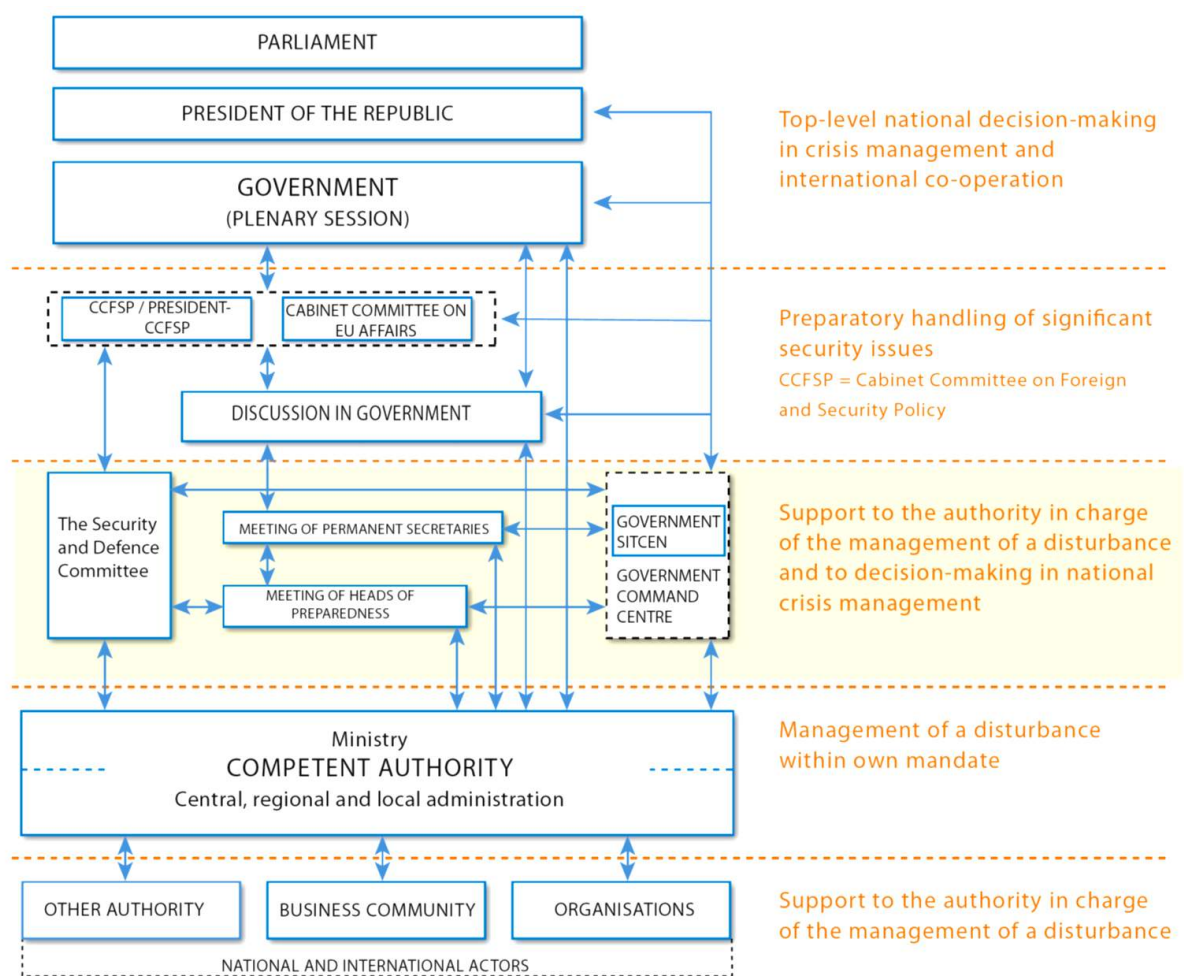


Figure 9: The principle of the management of disturbances
Source: "Security Strategy for Society", Ministry of Foreign Affairs 2010.

⁹⁸⁰ Ministry of the Interior: *National Platform for Disaster Risk Reduction*. Ministry of the Interior publication 14/2012

The Ministry of the Interior Department for Rescue Services directs and monitors rescue services. According to the Homepage of the Ministry of the Interior⁹⁸¹, the Department for Rescue Services is responsible for the following matters:

- rescue services
- emergency response centre operations, the **Emergency Response Centre Administration** and performance guidance for it
- the **Emergency Services College** and performance guidance for the College
- the Fire Protection Fund, excluding its operational and financial control
- international rescue operations
- contingency planning
- joint preparedness of regional authorities for emergency and abnormal conditions and the related central government duties
- Finland's Public Authority Radio Network (VITRE)
- lifesaving medals
- the Finnish Red Cross

The Department deals with the following matters in cooperation with the Police Department: performance guidance, budget and setting up of working groups of the Emergency Response Centre Administration; any other matters important for the work of the Emergency Response Centre Administration.

At regional level, Finland is divided into **22 regional rescue services** which manage operations in their respective regions (see Figure 4). Municipalities (at present 320 in total) are jointly responsible for the **Rescue Services** within designated regions and must have an agreement regarding the organisation within the region. Tasks of the rescue services consist primarily of firefighting, combating industrial disasters, and providing relief in case of traffic accidents, land-based oil spills and releases of hazardous material.

To prevent fires and other incidents, rescue departments work together with other authorities and with local residents and communities (see also 3.2.1), and take part in local and regional safety planning (see also 4.1 and 4.2). Main authorities are:

- the **police**
- the **Frontier/Border Guard** - mainly when helicopters or other aircraft is needed, e.g. in cases of forest fires or other major accidents or for airborne ambulance services in isolated and/or remote areas (the Coast Guard is part of the Frontier Guard and takes the key role in open sea rescue interventions)
- the **Defence Forces** - providing equipment, manpower and special expert services necessary for rescue activities where this is deemed necessary with regard to the extent and special nature of the accident

⁹⁸¹ Ministry of the Interior: Dep. Of Rescue Services

http://www.intermin.fi/en/ministry/organisation/department_for_rescue_services

- **social and health authorities**
- authorities and institutions in charge **of agriculture and forestry** – e.g. the Forest and Park Service is liable to provide expert assistance in the fighting of forest fires
- **environmental** authorities – e.g. provide rescue operators expertise concerning oil and other harmful material in case of spills or releases (*environmental authorities from Ministry over the Finnish Environment Institute SYKE down to local authorities are heavily involved in disaster preparedness and prevention and thus play a key role next to the rescue authorities*)
- authorities in charge of **passenger and goods transport and communications**
- agencies and institutions in charge of **radiation and nuclear safety** and **weather services**

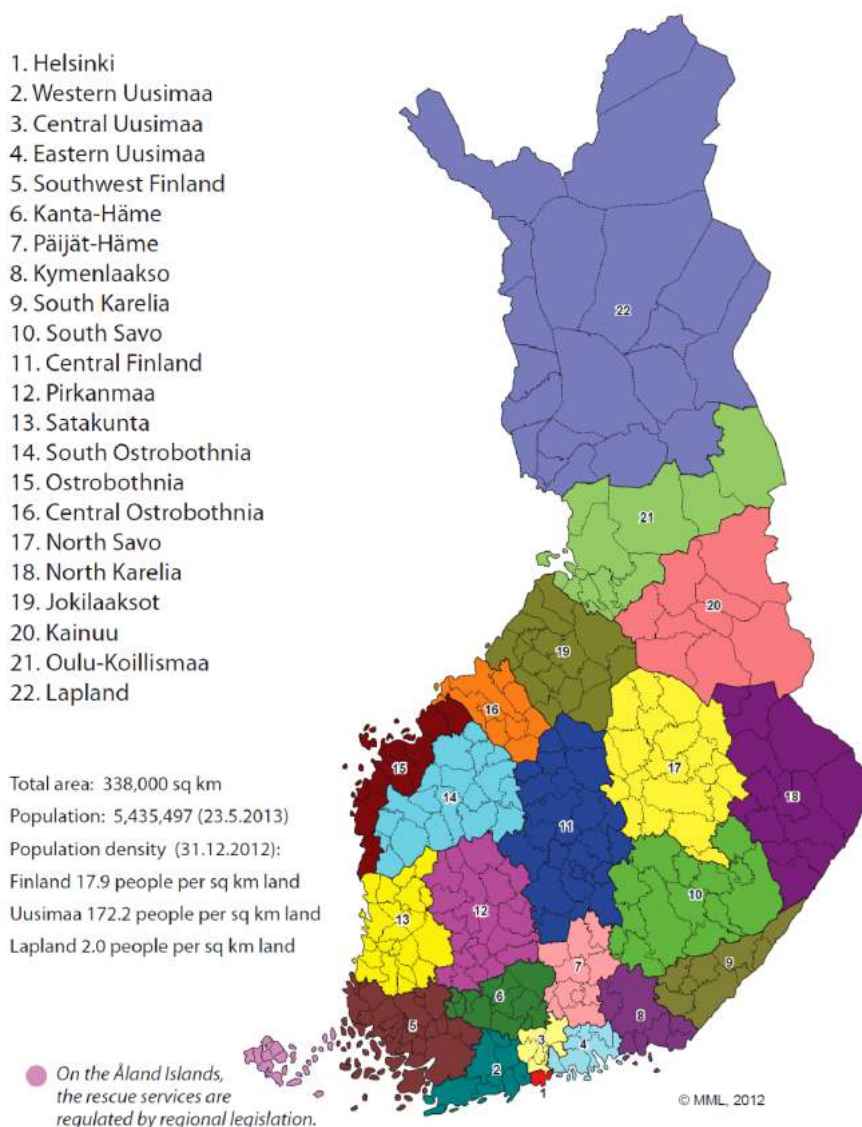


Figure 10: The 22 Rescue Services Regions of Finland

Source: Ministry of the Interior - Department for Rescue Services - "Rescue services in Finland" www.pelastustoimi.fi/

Voluntary, institutional, industrial and military **fire brigades** (contract fire brigades) also participate in performing rescue service duties as agreed between the brigades and the regional rescue services. **Voluntary fire brigades** (over 600 nationwide) play a significant role in the rescue services system. Organised in the form of private associations, they take part in operations according to an agreement with the permanent rescue service authority in the region. In some municipalities, the firefighting is entirely a voluntary fire brigade's task.

The *use of assistance provided by the Defence Forces*, as described above, is restricted by the Act on the Defence Forces 11.5.2007/551:

The Defence Forces may assist another Finnish authority in providing rescue or other assistance to another country in case of a terrorist attack, a natural disaster, a major accident or similar occurrence. The Defence Forces may assist by contributing equipment, material or expert assistance. Military force may not be used in providing such assistance.

The decision regarding the participation of the Defence Forces in an operation as described in subsection 1 above is taken by the Ministry of Defence at the request of the competent Ministry, after consulting the Ministry for Foreign Affairs.

If the project is extensive and an important principle is at stake, or if the significance of the matter otherwise requires, the decision regarding the participation of the Defence Forces in an operation as described in subsection 1 above is taken by the Government in general session. If the providing of such assistance is of major foreign policy importance, the decision is taken by the President of the Republic.

The Defence Forces may not be assigned to the duties referred to in subsection 1 without the decision-making procedure referred to in subsection 2 or 3, unless the authority of the Commander-in- Chief of the Defence Forces allows otherwise.

Finland is divided in 15 **Emergency Response Centre (ERC)** areas and all areas have their own ERC. The **ERC Administration** is directed and managed by the Ministry of Interior in cooperation with the Ministry of Social Affairs and Health. All emergency calls are made to one number, 112, and managed by ERC.

Rescue departments carry out the duties of rescue services in their respective rescue regions. They are supported by the Ministry of the Interior and represent the key actors to provide full coverage with rescue services at a defined level and to ensure that adequate tools and mechanisms for disaster risk management are in place. Regional rescue services are thus responsible for standards of service, appropriate organisation of the operations of the rescue departments as well as for other duties specified in the Rescue Act.

Six regional **State Administrative Agencies (AVI)** (+ Åland) supervise and assess the coverage and quality of rescue services and preparedness. They guide and direct rescue services' planning and coordinate plans in their respective regions.

The State Administrative Agencies together with the **Centres for Economic Development, Transport and the Environment Centres (ELY)** play a central role in the preparedness of regional administration.

As mentioned above, the environmental authorities are another key player in Finland's disaster preparedness and response. For instance, the **Finnish Environment Institute (SYKE)** operates

subordinate to the Ministry of the Environment. The Institute has research facilities and in combating chemical releases at sea it takes the general command over rescue units. Vessels utilised in these situations are mainly operated by the Frontier Guard, the Defence Forces or municipalities.⁹⁸²

Another example of a competent authority is the *Radiation and Nuclear Safety Authority (STUK)*, which operates 288 stations continuously measuring radiation in the environment (see also 4.2).

The *Finnish Crisis Management Centre (CMC Finland)*, located in Kuopio, is a governmental institution and a centre of expertise in *civilian* crisis management. Thus, it is not within the focus of this study, but worth mentioning. The main tasks of CMC Finland are to train and recruit experts for international civilian crisis management and peacebuilding missions as well as conduct research focusing on civilian crisis management. CMC Finland acts as a national head office for all seconded Finnish civilian crisis management professionals.⁹⁸³

3.2 Organisational cooperation

3.2.1 National Cooperation

All competent ministries have strong links and mechanisms for cooperation with local governments as well as key agencies and associations who support them in translating national policy into local and regional delivery. Resulting from the heavily decentralized system in correlation with the responsibility to cover all aspects relevant for disaster risk reduction in each competent authority, a lot of networks, specific agencies and sectoral cooperation exist at all levels including all sorts of stakeholders and actors as well as cross-border/bi- and multilateral international agreements (see 3.2), to fulfil the respective tasks within the authority's mandate.

For example, the *Red Cross*, as a major *non-governmental* response organization, has an auxiliary response capacity and is well integrated in public preparedness planning. It coordinates 50 voluntary response organizations within the framework of a Voluntary Rescue Service network (Vapepa, see also 2.6).

Environment accident response is another example of cooperation between a wide range of authorities and actors. They include the Finnish Environment Institute; Centres for Economic Development, Transport and the Environment; municipalities; the Finnish Transport Safety Agency; the Finnish Navy; the Rescue Departments and the Finnish Border Guard.

Businesses and organisations also participate, e.g. in *oil-spill response* at sea; the increase in marine traffic in the Baltic Sea is leading to an increased risk of oils spills. The Ministry of the Environment is responsible for general guidance and monitoring with regard to prevention of and response to oil spills and chemical spills at sea and land. SYKE, the Institute for Environment, is responsible for the prevention of and response to oil spills from ships whereas regional rescue services are responsible for the prevention of and response to land-based oil spills.⁹⁸⁴

⁹⁸² Emergency Prevention, Preparedness and Response Working Group (EPPR) of the ARTIC COUNCIL <http://www.arctic-council.org/eppr/about-eppr/>

⁹⁸³ Crisis Management Centre Finland CMC http://www.cmcfinland.fi/en/crisis_management_centre

⁹⁸⁴ Emergency Prevention, Preparedness and Response Working Group (EPPR) of the ARTIC COUNCIL <http://www.arctic-council.org/eppr/about-eppr/>

As mentioned under 2.4, the **National Emergency Supply Agency (NESA)** has been created, with the task to promote and co-ordinate the preparedness of the authorities to steer the country's economy for crisis situations and serious disturbances, thus securing the critical infrastructure and production activities of society, as requested by the Security of Supply Act and the Security Strategy for Society. This has resulted in a Public-Private Partnership in Security of Supply (see Figure 4).

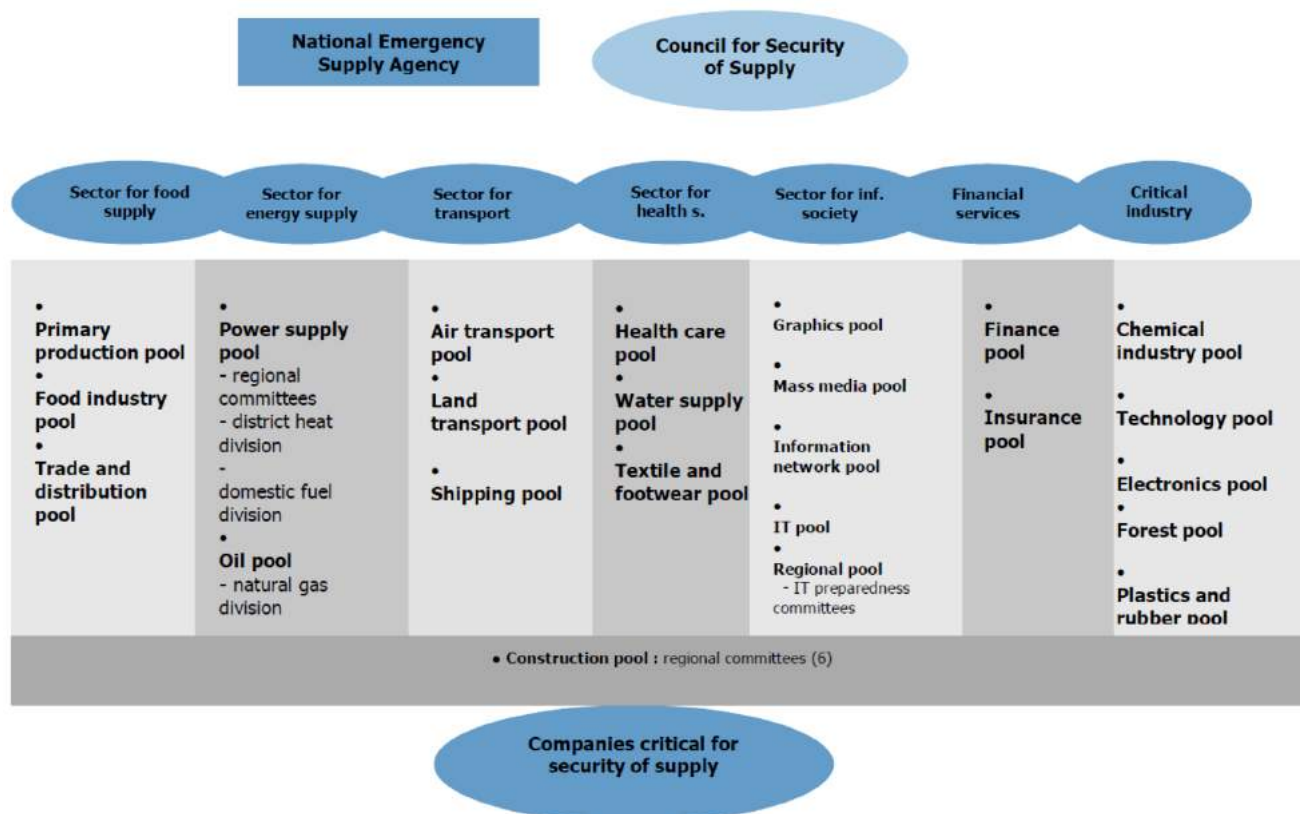


Figure 11: Public-Private Partnership in Security of Supply

Source: Ministry of the Interior: National Platform for Disaster Risk Reduction. Ministry of the Interior publication 14/2012.

Public opinion polls show that 99 per cent of all Finnish citizens trust the rescue services and evaluate their work positively. As mentioned earlier, the Government has furthermore set an ambition to make the Finnish rescue services the most effective in Europe and is currently planning a reform to improve their cost-effectiveness.

3.2.2 International Cooperation

The Country Study on Finland within the ANVIL project⁹⁸⁵ summarizes international cooperation as followed:

⁹⁸⁵ Country Study: Finland. The ANVIL project. June 2013

Up to now, Finland has not officially requested disaster assistance through regional and international arrangements. Nonetheless, Finland has entered into multiple bilateral agreements on mutual crisis management assistance which cover all neighbouring countries. In addition, Finland has signed related regional and multilateral provisions of the Council of Europe, the EU, NATO, the OSCE and the UN. On the regional level, Finland has signed provisions of the Council of the Baltic Sea States (CBSS), the Nordic Council of Ministers (NCM), the Baltic Development Forum and the Baltic Sea States Subregional Cooperation (BSSSC).

Finland takes part in international relief and rescue operations mainly under agreements signed with its neighbouring countries as well as through the European Union Civil Protection Mechanism (Monitoring and Information Centre, MIC) and on assignments from the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). Finland takes part actively in developing crisis preparedness under NATO's Partnership for Peace programme. Finnish assistance has taken place through the UN's UNDAC team (United Nations Disaster Assessment and Coordination Stand-By Team), or in the EU/MIC team of experts. Since 1993, Finland has maintained the FRF (Finnish Rescue Force) which is a 200 person task force for search and rescue missions in international assignments. A typical FRF team comprises 40 people and their equipment with a capacity of two weeks' self-sustaining operation in a disaster area.

Finland has been relatively careful in offering assistance and aid in civil security crises; a recent example of the Russian forest fires in 2010 showed the traditional careful consideration and respect of formal state agreements and hierarchical proceedings in providing help. The decision to provide assistance overseas is made by the Ministry of Interior at the request of another state or an international organisation. Capacity building, training and other practical tasks for international missions are ensured by the Crisis Management Centre (CMC) in Kuopio. Once a decision is made to provide assistance, the members of the task-force will be recruited among regional rescue services staff trained for international missions.

Rescue operations may include firefighting, searches, rescue, first aid, clean-up of oil and chemical spills, damage assessment and water rescue missions. Assistance may also include helping the population on site or evacuating the population, in which case leadership, electricity and power generation, cleaning and supplying water and arranging temporary accommodation may be involved.⁹⁸⁶ Thus, Finland contribute civilian resources—civil protection assets and UN Disaster Assessment and Coordination (UNDAC) personnel—or make cash contributions to humanitarian agencies. Finland does not contribute *military assets* to disaster responses⁹⁸⁷, but has as strong focus on developing niche capabilities of Defence Forces with regard to international assistance in military and civilian crisis management.⁹⁸⁸

Regarding regional cooperation and bilateral treaties, the Finnish Red Cross's report on legal preparedness for international disaster response 2014 states:

Finland participates in regional collaboration through various cooperation bodies and local and bilateral agreements. The regional divisions related to the agreements and cooperation bodies

⁹⁸⁶ VADEMECUM: Finland http://ec.europa.eu/echo/files/civil_protection/vademecum/fi/2-fi-2.html#inter

⁹⁸⁷ Stockholm International Peace Research Institute SIPRI. *The effectiveness of foreign military assets in natural disaster response*. Solna, 2008.

⁹⁸⁸ Ministry of Foreign Affairs. *Finland's Comprehensive Crisis Management Strategy*. 2009

are not necessarily consistent, and the system of agreements is not hierarchical. The most relevant agreement is usually applied to rescue services and international aid.

International obligations are usually implemented by law and/or a Government Decree. If regulations contain provisions of a legislative nature they are implemented in accordance with Section 94 of the Constitution of Finland.

For regional agreements, the report lists⁹⁸⁹:

1. Nordic agreements
 - a. Nordic agreement on rescue services (NORDRED)
 - b. Nordic Framework Convention on Health Care (NORDHELS)
2. Barents Treaty
3. Agreement on cooperation on aeronautical and maritime search and rescue in the Arctic
4. bilateral agreements between municipalities of Norway and Sweden based on the NORDRED agreement with regard to intermunicipal cooperation (agreements are based on the principle of reciprocal services and operations)
5. possible agreements of authorities on assistance, costs and cooperation with the Russian authorities, based on the Barents Treaty

For bi-lateral (national) agreements (additional to the above mentioned multilateral agreements):

1. Russia
 - a. Cooperation in sea and air rescue
 - b. Agreement on cooperation for the prevention of accidents and their consequences
2. Sweden
 - a. Agreement on cooperation in maritime and aeronautical rescue services
3. Norway
 - a. Agreement on cooperation regarding search and rescue services in border areas
4. Estonia
 - a. Agreement on cooperation and mutual assistance in cases of accidents
 - b. Agreement concerning cooperation on maritime and aeronautical search and rescue

3.2.3 Operational aspects regarding international assistance

The Finnish Red Cross provided a very good overview on the regular processes regarding international assistance⁹⁹⁰:

⁹⁸⁹ For more information on the respective agreements, see Finland's legal preparedness for international disaster response - Finnish Red Cross 2014 under <http://www.ifrc.org/en/what-we-do/disaster-law/news/europe/>

⁹⁹⁰ Finland's legal preparedness for international disaster response - Finnish Red Cross 2014 (p.34 f)

Requesting assistance

In Finland, the duty and jurisdiction for requesting international assistance is determined by the nature of the incident and by the system of agreements within which the request is being made.

Requesting international assistance does not presuppose that a national emergency or a state of emergency has been declared. No special criteria have been set in legislation or preparation for requesting assistance. There is no obligation to request international assistance or accept offers of assistance. Finland can reject all offers of assistance or specify the assistance it needs or is willing to accept, from individual employees to vehicles. Requests for assistance must be explicit and specified.

*In accordance with Section 35 of the Rescue Act, if authorities from more than one sector take part in rescue operations, the officer in charge of the rescue operations is in overall charge of the situation. In practice, the officer in charge of rescue operations in the area of the accident notifies the Department for Rescue Services of the Ministry of the Interior of the accident (or the officer on duty at the ministry outside office hours). They also assess the need for requesting international assistance. According to Section 38 of the Rescue Act, “the Ministry of the Interior may also request international assistance in the field of rescue services from the European Union, other states or international organisations”. The decision to request assistance is made by the **Director-General of the Department for Rescue Services** at the Ministry of the Interior of his or her deputy.*

*All administrative sectors have their own general leadership and, in cases such as cross-border threats to health, international assistance can be requested by the **Ministry of the Interior** or, in incidents relating to radiation safety, by **STUK**. Each authority decides on requesting assistance and the content of the assistance within its sector.*

*The **Finnish Red Cross** can request assistance independently from national Red Cross organisations in other countries, the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross (ICRC). In the Cap of the North, the Finnish Red Cross can request assistance independently in Finland, Sweden, Norway and Russia. The Nordic countries have made agreements on mutual assistance between national Red Cross organisations (the cooperation is based on agreements made at regular meetings).*

Finland has no common arrangements in place for requesting international assistance nor a designated body to process the offers of assistance received when international assistance is requested. At the international level, in particular in the case of large-scale disasters, several operators from different sectors and systems may offer assistance. In order to guarantee and define the correct and rapid assistance it would be useful to create a national system for processing offers of assistance.

National Contact Points

*The national contact point in Finland is the **Government’s Situation Centre** which operates under the **Prime Minister’s Office**. The **Government Situation Centre** is an around-the-clock*

contact point for officers on duty at ministries and for situation centres in various administrative sectors.

The Government Situation Centre is responsible for international communications related to the information it has received. Using the CECIS, the Government Situation Centre passes on the requests for international assistance made by Finnish authorities to the ERCC and other possible providers of assistance.⁹⁹¹

The principle rule is that the Ministry of the Interior is the competent authority and provides guidance in arrangements related to international assistance when many authorities are involved in a situation, but other agencies may have been designated as the national contact point in different agreement systems. Agreements relevant to this report include emergency notification and assistance systems of the IAEA, where the Radiation and Nuclear Safety Authority (STUK) under the Ministry of the Interior serves as the authority responsible for cooperation and situations of cross-border threats to health, where the jurisdiction lies with the Ministry of Social Affairs and Health. For sea rescue, the decision to request international assistance is made by the Maritime Rescue Coordination Centre. In air rescue, international assistance is requested by the aviation authority.

Rescue departments in Finnish border municipalities have special agreements on mutual assistance in rescue services with border municipalities in Sweden, for example. With Russia, Finland has adopted various common methods developed in practice over time. Local agreements may designate rescue departments or emergency response centres as contact points. According to the Barents Treaty, the primary national contact point in Finland is the emergency response centre in Oulu.

Finland has a long history of cooperation with Russia, and national contact points may be defined differently in various agreements. In addition, part of the information in the agreements is outdated.

Several reforms have taken place in the Finnish administration since Finland signed many international agreements; for example, the new Emergency Response Centre Agency was established in Finland, and in the agreements the definitions of contact points are not entirely up to date. The Ministry of the Interior has proposed that all contact point operations based on treaties be concentrated at the Government Situation Centre.

⁹⁹¹ The Government Situation Centre has no jurisdiction to issue decrees or regulations and serves as a coordinating authority only. It receives event notifications and reports from international partners and follows the news cycle. (Red Cross report)

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

According to section 47 of the Rescue Act, authorities, agencies and state and municipal enterprises are all required to provide their executive and expert assistance as need be to prepare emergency plans under the direction of the rescue services.

There is also an obligation to ensure business continuity and cooperate during responses to disasters and emergencies. Furthermore, dedicated emergency plans have to be set up for public events as well as for specific risk-prone buildings or industrial sites, under the responsibility of the owner or the occupant. Plans, which should follow the minimum requirements defined in the Rescue Act and be submitted to the rescue services, are checked regularly by the regional state agencies. The Rescue Act also requires educational institutions and hospitals to prepare and update emergency plans anticipating dangerous situations and their impacts, with detailed instructions for evacuation. Under the Internal Security Programme, local security plans should also be prepared at the local level. Community participation in emergency planning is furthermore enabled by the Finnish National Rescue Association and also by programmes of the Red Cross.

For specific areas, like nuclear facilities (fostered by the government decree on Emergency Response Arrangements at Nuclear Power Plants 2008) or ports, cooperation within the development of emergency plans with relevant business and industrial operators is requested.

Though, emergency plans most likely exist for all possible situations at all levels, a dedicated written (English) example could not be found within this study.

An example for emergency plans resulting in guidelines is the Safety Manual of the Port of Kokkola⁹⁹².

4.2 Operations planning

As mentioned before, each authority is responsible for its statutory functions not only during peacetime, but also during crises such as serious international disturbances, the threat of an armed attack, war, post-war situations, economic crises and disasters. Due to the all-hazard approach and the low risk profile of Finland, usually no specific operations planning are set out, but *contingency planning*.

The responsibility for self-preparedness also applies for owners or holders of a building, an industrial or commercial entrepreneur, an agency, institution or other organisation as well as for those, running operations which may particularly endanger people, property or the environment. The liability includes preparing rescue measures which they can take at their own initiative. The population exposed to the danger must be heard when drawing up the plan and informed thereof.

Rescue services must be planned and arranged so that the measures may be taken efficiently and without delay. The service level of the rescue services must correspond to the accident threats

⁹⁹² Safety Manual of the Port of Kokkola <http://www.portofkokkola.fi/safety/guide/?lang=en>

present in the municipality. The municipality's duty is to assess the threats present in its area and determine the service level of its fire brigade according to the threats (see also 1.1.2).

The Ministry of the Interior, for example, states:

The Ministry of the Interior, along with other authorities, is obliged to ensure that it can perform its duties not only in normal conditions but also in abnormal and emergency conditions. The Emergency Powers Act obliges public authorities to ensure that they can also perform their duties with the least amount of disruption in emergency conditions. The authorities must do this by drawing up contingency plans, preparing for emergency operations and taking other measures. Preparedness for emergency conditions is managed, supervised and coordinated by the Government and by each Ministry in its field of operations.

Within the duties of each ministry lies the ensuring of the strategic tasks appointed to them by the Security Strategy for Society (see Table 3).

As a result, the Ministry of the Interior is responsible for the nation-wide rescue-service preparations and arrangements as well as for the co-ordination of the tasks of rescue services belonging to the spheres of operation of different ministries. The Ministry directs rescue services as well as supervises their availability and level.

Another example is STUK, the Radiation and Nuclear Safety Authority, which shall specify detailed safety requirements concerning the implementation of safety level in accordance with the Guide for Nuclear Power Plant Emergency Preparedness 2010, as originally requested by the Nuclear Energy Act (990/1987).

Respective contingency planning may include international actors or may also face emergency situation abroad. A few (very divers) examples for contingency planning:

- [Winter navigation risks and oil contingency plan \(WINOIL\)](#) of the Finnish Institute for Environment SYKE
- [Nordic Contingency Planning and Crisis Management](#) of The Nordic Forum for Emergency Matters regarding the Power Sector (between Finland, Denmark, Norway and Sweden)
- [Joint Contingency Plan for the Nordic Embassies in Kathmandu, Nepal](#)
- ARTIC COUNCIL: [Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic – Appendix IV Operational Guidelines](#)

4.3 Logistics support in crises

As mentioned throughout this study, each competent authority is responsible for ensuring the vital functions for society within its mandate in all aspects. As a result, no general authority for supporting logistical equipment during natural or man-made disasters could be found. Each authority is obliged to arrange related agreements if necessary.

Finnish Defence Forces may contribute equipment for logistical support, however the use of military assets is restricted (see 3.1)

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Following the principle of the “competent authorities” (see 1.2), responsibilities for warning the population in times of crisis and emergencies are shared by a number of stakeholders and carried out on different levels and through multiple channels. The latest resolution for communications during crisis are the instructions of the Prime Minister’s Office of May 2013 Central Government Communications in Incidents and Emergencies, which *pay particular attention to seamless coordination of preparedness, management and communications activities as well as to effective flow of information. Reliable, efficient and timely internal and external communications are an inseparable element of incident management.*⁹⁹³ These instructions replaced the guidelines of 2007 Government Communications in Crisis Situations and Emergencies⁹⁹⁴.

The main early warning system in Finland is **LUOVA**, which is a *multi-hazard early warning system* operated by the Finnish Meteorological Institute in cooperation with other actors through a multi-agency process (FMI, SYKE and the Institute of Seismology at the University of Helsinki).

The strength of this state-of-the-art warning system is that it provides the appropriate technical platform to integrate and disseminate warnings. The platform is composed of several tools to integrate risk information and disseminate easy-to-use warning messages and maps through multiple channels to the risk management stakeholders. Initially developed for natural hazard warnings, it is now used for weather, marine, flood, earthquake, tsunami and space weather warning in close cooperation with other technical agencies. It builds on the 24/7 forecasting operations of FMI, and its daily colour-coded weather warnings based on pre-defined thresholds. LUOVA can be used to deliver tailored warnings with different lead-times and risk information depending on the users’ needs.

Other technical systems are also available to provide dedicated warnings for forest fires through automatic satellite detection, or nuclear radiation detection. On the basis of the information received from the LUOVA system, the authorities plan on their own actions and warn the public.

Currently, FMI and SYKE are working jointly to establish the **Flood Warning Centre** which is expected to become operational as of 2014. The aim of the Flood Centre is to provide Finnish society with information related to floods from one point of contact available 24/7.

The Emergency Warnings Act 10.8.2012/466 legislates on emergency warnings issued by the authorities to be broadcast on the radio or on television. Emergency warnings are brief announcements to warn and instruct the public that can be issued by the competent authority if it is necessary to warn the public when a dangerous incident may threaten the lives or health of people or destroy or severely damage property. Regarding warning dissemination, specific partnerships with major broadcasting media have been set-up to allow programmes to be interrupted or to have a text message appearing on TV screens nationwide or at the regional level.

Public warning sirens are also used as they cover more than 80 per cent of the population.

⁹⁹³ Central Government Communications in Incidents and Emergencies. Prime Minister’s Office 03/2013 (Foreword)

⁹⁹⁴ Government Communications in Crisis Situations and Emergencies. Prime Minister’s Office 20/2007

Neighbouring countries are notified of nuclear accidents as well as oil and chemical accidents at sea or on boundary waters. The Ministry for Foreign Affairs plays a central role in foreign communications.

Finnish authorities currently use and continue to develop new methods for utilising the social media in context with emergency warnings, e.g. by participation of the Emergency Services College in the EU FP7 project ISAR+ (Online and Mobile Communications for Crisis Response and Search and Rescue).⁹⁹⁵

At the national level, the authorities communicate using the **VIRVE network**, which is based on the TETRA standard and is operated by the State Security Networks Ltd. The network covers the entire area of Finland, and access is limited to specific user groups. The network is primarily used by rescue departments, the police, Finnish Customs, the Finnish Border Guard and the Finnish Defence Forces. The Ministry of Transport and Communications decides on the user groups entitled to use the VIRVE network.

Furthermore, Finland is, according to the 2014 Peer Review Process⁹⁹⁶, currently developing two new operational systems making use of high technologies and introducing innovative working processes to improve cooperation and exchange of information during emergencies:

*The **ERICA** common operational platform will integrate information flows from all emergency response authorities nationwide (police, fire & rescue, medical, border guard), with GIS mapping, risk assessment information as well as operational models for emergency response for overall accident management in the Emergency Response Centres.*

*To complement this coordination platform of crisis centres, the operational **KEJO** system will support emergency operations of the Finnish authorities in the field. These systems aim to ensure that Finland has a coherent, reliable and networked nationwide emergency response administration by 2015. There is also a situation awareness system for environmental emergency response (Baltic Oil Response Information System, **BORIS 227**) for oil spills.*

⁹⁹⁵ More information on EU FP7 project ISAR+ at <http://isar.i112.eu/index.html>

⁹⁹⁶ Peer Review Report Finland 2014.

5 Capabilities

5.1 Human resources

The Comprehensive Report on the Rescue Services in Northern Finland from 2009 indicates resources related to the relevant tasks of rescue services as followed:

Within the 22 rescue service regions there are rescue departments with full-time (5000) and part-time personnel. On top there are 635 voluntary fire-brigades and 153 industrial brigades in Finland. The number of part-time and voluntary fire-fighter is 14300. Disaster planning, fire inspections and other duties of the authority are conducted by full-time rescue personnel. Law given duties of regional rescue services are: education and advising public and expert advisory to matters concerning rescue services, prevention of accidents and fires, civil defence, training for rescue personnel, planning and coordinating with different authorities, carry out rescue operations. Finnish rescue services have 4000 vehicles available and the annual expenditure is 340 million euro and they carry out 85000 missions annually. The missions are distributed between fires (18%), rescue missions (25%), checking and verification (35%), first response (medical) (15%) and assistance (7%).

Regional reforms and the joining of responsibilities are estimated here as reasons for the decreasing numbers of authorities but nearly constant numbers of personnel.

The Finnish rescue services currently lists its personal as follow⁹⁹⁷:

- 570 volunteer fire brigades⁹⁹⁸
- 105 institutional and industrial fire brigades Personnel
- 4,800 full-time employees
- 14,600 part-time and voluntary fire brigade members

To better estimate their capabilities; here are some average numbers of their operations:

- Emergency missions per year
The total number of call-outs for rescue departments is about 110,000 a year
- Fires
Every year, rescue departments are called out to about 15,000 fires.
Of these:
 - 6,300 are structural fires
 - 2,500 are vehicle fires

⁹⁹⁷ Ministry of the Interior - Department for Rescue Services. *Rescue services in Finland*. 2013

⁹⁹⁸ Number vary between 570 and 635 (RESCUE SERVICES IN NORTHERN FINLAND - COMPREHENSIVE REPORT 2009) from different resources, nevertheless the official statement by the rescue services from 2013 is listed

- 3,000 are wildfires (The number varies considerably from year to year, depending on the dryness of the summer.)
- 3,300 are other fires.
- Other call-outs

The average number of other callouts is 29,640 per year.

Of these

- 13,500 are traffic accidents
- 9,000 are loss prevention tasks
- 2,500 are tasks to combat oil spills
- 2,200 are tasks to rescue people
- 2,000 are tasks to rescue animals
- 320 are tasks relating to hazardous substances
- 120 are explosions and collapsed buildings, roads and other structures.

Both information on the rescue service's resources have to be topped with numbers of all divers other authorities involved in disaster preparedness and response, such as police, medical healthcare (pre-hospital and hospital healthcare), the Frontier Guard, the Emergency Response Centres, relevant agencies, equipment and personal of defence forces or the Network of voluntary organisations Vapepa (see 2.6), coordinated by the Red Cross etc. Volunteer rescue workers participate in search and maintenance, help and support for casualties and their families.

5.2 Materiel (non-financial) resources

See 5.1

5.3 Training

The competent authority for training of rescue services in Finland is the **Emergency Services College** in Kuopio under the supervision of the Ministry of the Interior (see 3.1).

As summarizes by the comprehensive report on the Rescue Services in Northern Finland (2009),

the Emergency Services College, in Kuopio, provides education and training in its field of specialisation under the supervision of the Ministry of the Interior. The College provides basic vocational training and further training in rescue services, preparedness training for emergency situations, and other training related to rescue services. The College provides training leading to a vocational degree in the following training programmes:

- Firefighter

- Emergency Response Centre Operator
- Sub-Officer
- Fire Officer, Bachelor of Engineering
- The Fire Officer's Training Programme is arranged in cooperation with Savonia University of Applied Sciences.

The College also provides in-service training for the personnel working for the rescue services and emergency response centres. The main goal is to ensure that these organisations have access to the best possible knowledge and skills to maintain the standard of the services they provide.

All vocational qualifications in the field of rescue services are awarded by the Emergency Services College. A matriculation examination or vocational qualification is a prerequisite for admission to an educational programme leading to a professional qualification in rescue services.

Training is also provided in international civil protection and civilian crisis management.

As an example for decision-makers training, the report states that

the ERC operator gets an 18 months long training at the Emergency Services College where they trained to receive and handle different types of emergency calls. After the initial risk assessment suitable actions are taken by the operator: send suitable response to the site or refer the caller to other services available.

According to Finland's Peer Review Report (2014),

*Training is also provided by individual associations and organisations, offering courses on an array of issues, including empowering people to take responsibility for their own security. For example, the **Finnish National Rescue Association (SPEK)** groups 37 NGOs dedicated to the advancement of rescue and safety to build an understanding of self-preparedness within Finland's communities. It cooperates closely with the Ministry of the Interior to develop and conduct courses in accident prevention, volunteer activities and preparedness, and civil protection. It also supports specific activities aimed at women and youth.*

*The **Finnish Red Cross**, with its 500 branches and some 30,000 volunteers, also offers courses in first aid and organises campaigns aimed at resilience-building. Its work is particularly impressive in supporting local communities to build risk awareness in scenarios such as winter power cuts or storms, as well as in supporting women's roles in resilience-building.*

*The **Finnish Association of Fire Chiefs** also provides fire, rescue and safety training, produces and publishes educational and training materials and makes proposals to improve safety.*

Cross-border and multinational trainings takes place in exercises within the respective bi- and multilateral agreements of Finland and its rescue service authorities (see 1.4.4 and 3.2.2).

5.4 Procurement

Various information about procurement aspects has been found within this study, though no specific answers to procurement regulations or procedures with regard to disaster risk reduction capabilities could be found within the given timeframe.

The **Public Procurement Act** (1505/1992; amendments up to 1530/2001 included), which is (probably) applicable for the procurement of most resources (the Act hasn't been mentioned by name in any related document)

The State authorities, local authorities and other contracting entities referred to in this Act shall, with a view to promoting competition and ensuring equal and non-discriminatory treatment of those who participate in a tendering procedure, observe this Act in their contracts.

*This Act shall **not** apply to:*

(1) contracts which are declared secret or contracts where the protection of the basic interests of the State's security requires a different procedure or where special safety regulations shall be observed in accordance with the laws, regulations or administrative provisions;

(2) supply contracts which are principally suited to military use;

(3) contracts awarded pursuant to the particular procedure of an international organisation;

(4) contracts awarded in pursuance of an international cooperation agreement entered into by Finland. (1247/1997)

The European Commission shall be notified of the international cooperation agreements referred to in section 1(2)(4) above. (1247/1997)

As a result, it could not be ruled out that specific regulations with regard to procurement of relevant capabilities exist.

The Finnish Red Cross for example, states⁹⁹⁹ about its own rules:

The procurement rules of the Finnish Red Cross ensure that all purchases are made cost-effectively. The rules are based on Finnish legislation, EU regulations and the rules of the Humanitarian Aid department of the European Commission (ECHO).

5.4.1 Procurement regulation

See 5.4

⁹⁹⁹ Logistics Centre of the Red Cross <https://www.redcross.fi/node/1556/what-finnish-red-cross/logistics-centre-finnish-red-cross>

5.4.2 Procurement procedures

See 5.4

5.5 Niche capabilities

Finland doesn't strive to develop specific niche capabilities relevant for the response of natural or man-made disasters. However, regarding niche capabilities in military and civilian crisis management, national strategies exist.

In context with civilian crisis management, Finland's National Strategy for Civilian Crisis Management (update 2014) states:

In addition to police, rule of law, border security, human rights and gender equality expertise, Finland is improving its capacity in offering civilian crisis management related niche capabilities to those situations that call for special expertise such as forensic pathology, victim identification and investigation of war crimes, rapid search and rescue support to supplement the local capacity, and different techniques for criminal sanctions, such as correctional services. One should also look into other fields within the judicial sector, from which Finland has a lot to offer, such as the development of legal services, legal assistance and areas involving access to justice. Attention will be paid to competence related to the operating environment as well as conflict and culture sensitivity. There is a global demand for Finnish civilian crisis management know-how. The aim is to increase the export of expertise in civilian crisis management, social and gender equality and international security.

The development of niche capability in military crisis management is requested by the Security Strategy for Society (2010).

Nevertheless, some of the above mentioned capabilities also apply to response capabilities related to natural or man-made disasters, as treated in this study. Considering the high level of education and the up-to-date technical standard, it is assumed that individual experts, such as **Finnish communication experts** are recognized, for example for technical assistance support teams for On-Site Operations Coordinations Centers, though it couldn't be found out within the timeframe of this study.

Resources

Legislative acts

The Finnish Red Cross's report on legal preparedness for international disaster response 2014 lists the following acts as sources with regard to legislation:

Act on Centres for Economic Development, Transport and the Environment 20.11.2009/897

Act on Cooperation between the Police, Customs and the Border Guard 11.9.2009/687

Act on Emergency Response Centre Operations 20.8.2010/692

Act on Health Care Professionals 28.6.1994/559

Act on Oil Pollution Response 1673/2009

Act on Regional State Administrative Agencies 896/2009

Act on Relief of Double Taxation 18.12.1995/1552.

Act on State Civil Servants 19.8.1994/750

Act on State Treasury 15.2.1991/305

Act on the Airport Network and Airport Charges 11.3.2011/210

Act on the Autonomy of Åland 16.8.1991/1144

Act on the Defence Forces 11.5.2007/551

Act on the Delimitation of the Territorial Waters of Finland 18.8.1956/463

Act on the Emergency Services College 21.7.2006/607

Act on the Finnish Meteorological Institute 19.12.2008/957

Act on the Finnish Red Cross 25.2.2000/238

Act on the Formation of Rescue Service Regions 1214/2001

Act on the Openness of Government Activities 21.5.1999/621

Act on the Participation of Civilian Personnel in Crisis Management 30.12.2004/1287

Act on the Provision of Assistance by the Defence Forces to the Police 5.12.1980/781

Act on the Recognition of Professional Qualifications 30.11.2007/1093

Act on the Use of Certain Internationally Protected Symbols 21.12.1979/947

Act on Voluntary National Defence 11.5.2007/556

Aliens Act 30.4.2004/301

Associations Act 26.5.1989/503

Border Guard Act 15.7.2005/578

Communicable Diseases Act 25.7.1986/583

Communications Market Act 23.5.2003/393

Customs Act 29.12.1994/1466

Emergency Powers Act 29.12.2011/1552

Emergency Warnings Act 10.8.2012/466

Employment Accidents Insurance Act 20.8.1948/608

Excise Taxation Act 182/2010

Government Decree on Civil Defence Shelters 5.5.2011/408

Government Decree on Money Collections 21.6.2006/503

Government Decree on Personal Import of Medicinal Products into Finland 1088/2002

Government Decree on Rescue Services 5.5.2011/407

Government Decree on the Equipment and Supplies in Civil Defence Shelters 5.5.2011/409

Government Decree on the Safety Committee (77/2013)

Government Resolution on Security of Supply 21.8.2008/539

Government Rules of Procedure 3.4.2003/262

Income Tax Act 30.12.1992/1535

Medicines Act 10.4.1987/395

Ministry for Foreign Affairs Rules of Procedure 28.8.2008/550

Money Collection Act 31.3.2006/255

Notification on the application of the Schengen acquis, Ministry for Foreign Affairs of Finland, 23/2001

Nuclear Energy Act 11.12.1987/990

Personal Data Act 22.4.1999/523

Police Act 7.4.1995/493 (annulled on 31 December 2013); Police Act 872/2011 took effect on 1 January 2014

Railway Act (304/2011)

Rescue Act 29.4.2011/379

Security of Supply Act 18.12.1992/1390

Social Welfare Act 17.9.1982/710

State of Defence Act 22.7.1991/1083

Territorial Surveillance Act 18.8.2000/755

The Constitution of Finland 11.6.1999/731

Tort Liability Act 31.5.1974/412

Value Added Tax Act 30.12.1993/1501

also found:

Climate Change Act (609/2015) http://www.ym.fi/en-us/The_environment/Legislation_and_instructions/Climate_change_legislation

Dam Safety Act 494/2009

Government Decree on Emergency Response Arrangements at Nuclear Power Plants 735/2008

Draft 3, 2.11.2010 Nuclear Power Plant Emergency Preparedness

Other normative acts

Official documents (white papers, strategies, etc.)

Secretariat of the Security and Defence Committee. *Finland's Cyber Security Strategy*. Government Resolution 24.1.2013. Helsinki

Ministry of Agriculture and Forestry. *Finland's National Strategy for Adaptation to Climate Change*. Publications 1a/2005. Helsinki 2005

Ministry of Agriculture and Forestry. *Finland's National Climate Change Adaptation Plan 2022*. Government Resolution 20.11.2014. Helsinki 2014

Ministry of Agriculture and Forestry. *Rural Development Programme for Mainland Finland 2014–2020*. Unofficial translation 2014

Ministry of Defence. *Security Strategy for Society*. Government Resolution 16.12.2010. Helsinki 2010

Ministry of Foreign Affairs. *Finland's Comprehensive Crisis Management Strategy*. 2009

Ministry for Foreign Affairs and Ministry of the Interior. *Finland's National Strategy for Civilian Crisis Management – Update*. Prime Minister's Office Publications 10/2014

National Security Research Strategy. Advisory Board for Sectoral Research 18:2009.

Ministry of the Interior. *Rescue Services Strategy 2015*. Ministry of the Interior publications 14/2007

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Prime Minister's Office. *Finnish Security and Defence Policy* 2012. Government Report. Helsinki: Prime Minister's Office Publications 1/2013.

Prime Minister's Office. *Finland's Strategy for the Arctic Region* 2013. Government Resolution on 23 August 2013. Helsinki: Prime Minister's Office Publications 16/2013

Valtioneuvoston päätös huoltovarmuuden tavoitteista 5.12.2013. Helsinki: Huoltovarmuuskeskus, Työ- ja elinkeinoministeriö. (*Government Resolution on Safeguarding the Security of Supply*. Helsinki: National Emergency Supply Agency, Ministry of Employment and the Economy)

Online resources (e.g. websites of key CM organizations)

Arctic Council <http://www.arctic-council.org/index.php/en/>

Baltic Marine Environment Protection Commission – HELCOM <http://www.helcom.fi/>

Crisis Management Centre Finland <http://www.cmcfinland.fi/>

Emergency Services College: <http://www.pelastusopisto.fi/> (main pages in finish)

European Union Strategy for the Baltic Sea Region (EUSBSR) <http://www.balticsea-region-strategy.eu/>

Finnish Environmental Institute SYKE <http://www.syke.fi/en-US>

Finnish Meteorological Institute FMI <http://en.ilmatieteenlaitos.fi/>

Flood Map Service Finland (English version under construction, some translations missing)
http://paikkatieto.ymparisto.fi/Html5Viewer_2_2/Index.html?configBase=http://paikkatieto.ymparisto.fi/Geocortex/Essentials/REST/sites/TulvakarttapalveluEN/viewers/HTML5220/virtualdirectory/Resources/Config/Default

Joint website of Finland's environmental administration <http://www.environment.fi/en-US> (by Ministry of the Environment, SYKE and The Housing and Development Centre of Finland ARA)

Ministry of the Interior: <http://www.intermin.fi/>

Ministry for Foreign Affairs: <http://www.formin.fi>

Ministry of Defence: <http://www.defmin.fi>

Ministry of Defense - Secretariat for Defence Committee. *Security in Society*
<http://www.yhteiskunnanturvallisuus.fi/en>

Ministry of the Environment <http://www.ym.fi/en>

National Emergency Supply Agency (NESA) <http://www.nesa.fi/security-of-supply/>

Prime Minister's Office Finland: <http://vnk.fi/etusivu/en.jsp>

Rescue Services: http://www.112.fi/other_languages (main pages in finnish) State Security Networks Ltd. http://www.erillisverkot.fi/en/erillisverkot/home_page/

Vademecum for civil protection: Country profile - Finland
http://ec.europa.eu/echo/files/civil_protection/vademecum/fi/2-fi.html

Publications

ARTIC COUNCIL: *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic – Appendix IV Operational Guidelines*. May 15, 2013 Revision 1: January 28, 2014

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Ministry of the Interior. Outline for national reporting and information on disaster reduction for the World Conference on Disaster Reduction (Kobe-Hyogo, Japan, 18-22 January 2005). *Country Report Finland*. 2004, <http://www.unisdr.org/2005/mdgs-drr/national-reports/Finland-report.pdf>

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

FRANCE

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: EPLFM (Frédérique Giroud)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

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Overview

The French crisis management & disaster response concept is driven by the ORSEC mechanism (Organisation of the Civil Defence Response) which organizes event management and crisis management. As it is modular and progressive, it can adapt to the type, scale and evolution of the event. In the occurrence of a major disaster, the Prime Minister is the head of upper level operations. Operations are coordinated with the other ministries. The operational organization managing crises at the Directorate-General for Civil Protection is the Interministerial Crisis Management Operating Centre (COGIC). The COGIC can activate national means in response to crises. All French departments have an operational centre or crisis unit. At the departmental level, the department Prefect, invested with police powers, is the Director of Rescue Operations (DOS). He commands the ORSEC mechanism (Organisation of the Civil Protection Response). He activates the Departmental Operational Centre (COD) and deploys the Operational Commandment Post (POC). At the departmental level, the Prefect gathers around him a hard core of actors: Departmental Fire and Rescue Service (SDIS); sanitary and social services; police; gendarmerie (military police); regional council; equipment agency; civil protection associations. Each entity has its own organization and its own operational response. Of course, NGOs participate to crisis management but they must receive an agreement from the General Directory of Civil Protection and Crisis management (DGSCGC) in order to work and to be integrated into an emergency device. Moreover, private businesses can be requisitioned by the Prefect as needed. Each institution involved in crisis management participates with its own funds and according to their policy to the preparation of rescue operations and response. Financing can be from national or local (region, department, municipal...) sources.

Concerning international cooperation, the Ministry of the Interior, through a specific unit, is in charge of managing the engagement for disaster response and relief.

France owns several modules that can be sent in reinforcement for crisis in the EU or other MS.

Table of Contents

FRANCE Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	708
Overview.....	709
Table of Contents	710
List of Figures	712
List of Tables.....	712
List of Abbreviations.....	713
1 Policy	716
1.1 Risk Assessment	716
1.2 Policy and Governance	717
1.2.1 Strategy scope and focus	717
1.2.2 Monitoring and analytical support to policy making; R&D	718
1.2.3 Policy for Prevention	719
1.2.4 Policy for Preparedness	720
1.2.5 Policy for Response	720
1.2.6 Policy for Relief and Recovery	721
1.3 Financing	723
1.3.1 Investing in preparedness	723
1.3.2 Investing in consequence management	723
1.4 Policy review, Evaluation & Organisational Learning	724
1.4.1 Post-Disaster Assessment	724
1.4.2 Departmental Lessons Learned systems	725
1.4.3 Centralised (national) Lessons Learned system	725
1.4.4 International exchange for Lessons Learned	726
1.4.5 Regular policy reviews	726
1.5 Resilience	726
1.6 Information sharing and data protection	728
1.6.1 Data protection and Information sharing in Crisis Management	728
1.6.2 Voluntary Organisation Databases	729
1.6.3 Social media and crisis management	729
2 Legislation	730
2.1 Crisis (emergency, disaster) management concept.....	730

2.2	General crisis (emergency, disaster) management law	730
2.3	Emergency rule	731
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	732
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	732
2.5.1	Departmental level	732
2.5.2	Local level	733
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	733
2.7	Legal regulations for international engagements of first responders and crisis managers	735
3	Organisation	737
3.1	Organisational chart.....	737
3.2	Organisational cooperation	744
4	Procedures	746
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	746
4.2	Operations planning.....	746
4.3	Logistics support in crises	747
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	747
5	Capabilities.....	749
5.1	Human resources	749
5.2	Material (non-financial) resources.....	752
5.3	Training	755
5.4	Procurement	757
5.4.1	Procurement regulation	757
5.4.2	Procurement procedures	762
5.5	Niche capabilities	764
	Resources	767
	Legislative acts	767
	Official documents (white papers, strategies, etc.)	768
	Online resources (e.g. websites of key CM organizations)	768

List of Figures

<i>Figure 1: Authority Powers at the Central Level (EPLFM).....</i>	<i>737</i>
<i>Figure 2: Territorial Organization for Defence (EPLFL document).....</i>	<i>738</i>
<i>Figure 3: Structures for Defence and Crisis Management (EPLFM document).....</i>	<i>739</i>
<i>Figure 4: Organisation of the Zone Operational Centre (EPLFM Document)</i>	<i>741</i>
<i>Figure 5: Structure Levels of Ministries (part 1, EPLFM document)</i>	<i>742</i>
<i>Figure 6: Structure Levels of Ministries (part 2, EPLFM document))</i>	<i>743</i>
<i>Figure 7: Organisation of the Departmental Command Post (EPLFM document)</i>	<i>744</i>

List of Tables

<i>Table 1 Responsibilities of crisis management players (EPLFM document)</i>	<i>718</i>
<i>Table 2: Public procurement Procedures for supplies and services (EPLFM document).....</i>	<i>763</i>

List of Abbreviations

ANEMF	Medical Students of France
ANR	National Agency for Research
AMUF	Association of Emergency Doctors of France
BMPM	Marine Fire Brigade of Marseille
BOAMP	Official Journal for Public Procurement Announcing
BPI France	Public Bank of Investment
BSPP	Paris Fire Brigade
CBRN-E	Chemical, Biological, Radiological, Nuclear and Explosives
CECIS	Common Emergency Communication and Information System
CIC	Interministerial Crisis Centre
CMP	Public Procurement Code
CNIL	National Commission for Computing and Freedom
COD	Departmental Operations Centre
CODIS	Operational centre or Crisis Unit
COGIC	Interministerial Crisis Management Operational Centre
COS	Incident Commander
COZ	Zone Operational Centre
CPCO	National Police and Planning and conduct Operation Centre
CRICR	Regional Information and Road Coordination Centre
DAJ	Direction of Legal Affairs
DDRM	Departmental File for Major Risks
DDSP	Departmental Director of Public Security
DICRIM	Municipal Information File for Major Risks
DIS	Airborne specialized intervention detachment
DGGN	General Directorate of National Gendarmerie
DGPN	General Directorate of the National Police
DGPR	Head Office for Risk Prevention
DGSCGC	General Directorate of Civil Protection and Crisis Management
DOS	Director of Rescue Operations
ECASC	School of Application of Civil Protection
EEN	European Enterprise Network
EMiZ	Interministerial Defence Zone
ENSOSP	National School for Civil Protection Officer

EPRUS	Establishment of Preparedness and Response to Health Emergencies
ERC	Emergency Response Centre
ESCRIM	Unit of Civil Protection for Quick Medicalised Response (French Hospital of Civil Protection)
ESOL	Logistics and Operational Support Unit
FEDER	(ERDF) European Regional Development Fund
FNRASEC	National Federation of Radio Transmitters at the service of Civil Security
FORMISC	Military Civil Protection Units
FUI	Interministerial Single Fund
HUSAR	Heavy USAR Team
JAL	Legal Announcing Journal
JORF	Official Journal of French Republic
INSARAG	International Search and Rescue Advisory Group
LUSAR	Light USAR Team
MUSAR	Medium USAR Team
OCHA	Office for the Coordination of Humanitarian Affairs
MSGU	Social Media In Emergency Situation
OJEU	Official Journal of European Union
ORSEC	Organisation of the Civil Protection Response
PCC	Local Command Post
PCS	Local Protection Plan
POC	Operational Commandment Post
PPI	Specific Intervention Plan
PPR	Plan for Risk Prevention
PRCI	International Collaborative Research Projects
RCSC	Local Civil Protection Reserve
SAMU	Emergency Medical Assistance Service
SDIS	Departmental Fire and Rescue Service
SFMC	French Society of Disaster Medicine
SFMU	French Society of Emergency Medicine
SIDPC	Interministerial Service of Defence and Civil Protection
SGAP	General Secretarial Office for Police Administration
SMEM	Social Media in Emergency Management
SNCF	National Society of French Railways
SOP	Standing Operating Procedures

SZSIC	Zone Information and Communication Systems Service
TPE	Multidisciplinary sixth-form school project
USAR	Urban Search and Rescue
VLTT	Off-road liaison vehicle
VISOV	International Volunteers Supporting Virtual Operations

1 Policy

1.1 Risk Assessment

Risk assessment in France is established based on the study of hazards and stake vulnerability, it is integrated in risk prevention plans, elaborated at the initiative of the State, and stipulated and approved by the Prefect after consulting local authorities and after a public inquiry.

This knowledge relies on three foundations:

- Knowledge of past events thanks to historical researches and to the creation of data bases (seismicity, climatology, snow layer study), atlases (flood risk area maps, avalanche hazard maps), etc..;
- Research conducted by different services of the State, such as Météo-France (French national meteorological centre), and by French and European laboratories with the aim of penetrating phenomena mechanisms and anticipating their behaviours, either for earthquakes, ground movements, forest fires or hydraulic and technologic risks;
- Technical studies that enable to establish maps predicting the increase and intensity of the phenomena. Those studies sometimes allow predicting the appearance of some events a few hours or a few minutes before their appearance.

The regional Prefect, with the support of the regional directorates, operates the management and the coordination of government policies, especially the ones related to crisis management, implemented under the authority of the departmental Prefect.

The Prefect is required to inform the Mayor of the risks present on his municipality (*art. L.121-2 du Code de l'Urbanisme; French town planning code¹⁰⁰⁰*). Nevertheless, local elected representatives can take the initiative of additional studies if needed. The “porté à connaissance” (brought to notice) of the Prefect is the Mayor’s main source of information for natural hazards. In addition to the DDRM (Dossier Départemental des Risques Majeurs: Departmental File for Major Risks), the Prefect has to forward to the Mayor all available documents concerning the natural and technological risks present on the district.

France is mainly subject to flood and ground movement hazards (especially clay shrinkage and swelling) but also to phenomena linked to atmosphere (storms, cyclones in the DOM TOM (Departments and Territoires d’Outre Mer: Overseas Departments and Territories), lighting, hail, snow and freezing rain), to periods of intense cold, heat waves or drought, to forest fires and to avalanches. The country is also subject to seismic risks and more locally to volcanic eruption. The tsunami risk should also be taken into account.

¹⁰⁰⁰<http://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000006074075&idArticle=LEGIARTIO00006814375&dateTexte=20100204>

According to the Ministry, two out of three municipalities are more or less submitted to at least one natural risk. For a total of 36 000 municipalities, more than 18 000 are vulnerable to flooding (more than one out of four French person and one out of three jobs would be situated in a potential flooding area).

Likewise, more than 11 000 municipalities are vulnerable to ground movements, not less than 21 000 municipalities are subject to seismic risk and more than 6 000 are threatened by forest fires.

The notion of technological risk, opposed to the one of natural risk, gathers the risks from anthropogenic origins: industrial, nuclear and biological risks. Four sources of major technological risk are presents in France: industrial facilities, nuclear facilities, large dams and hazardous material transports. Furthermore, mining sites can also be a source of accidents.

1.2 Policy and Governance

1.2.1 Strategy scope and focus

In the following table are reported the actors in charge of each activity, showing that the strategic scope of crisis management is fully covered.

What	Who	How
Hazard knowledge	Ministry of Sustainable Development Ministry of Agriculture (forest)	Financing of scientific and technical studies
Monitoring	Ministry of Sustainable Development Ministry of Agriculture Ministry of the Interior (Home Office) Ministry of Research	Equipment of the areas with means to monitor floods, volcanism, large ground movements, earthquakes, tsunamis.
Information	Ministry of Sustainable Development Ministry of Interior (Home Office) Mayor	The Prefect creates, with the Ministry of Sustainable Development financing, the DDRM (Department File for Major Risk). The Mayor creates the DICRIM (Dossier d'information communal sur les risques majeurs: Municipal Information File for Major Risks) The Ministry of Sustainable Development operates a national dissemination of the information via internet.
Education	Ministry of National Education Ministry of Sustainable Development Ministry of Research	Transcription in Middle school and high school programs and in the multi disciplinary sixth-grade school project (TPE: travaux personnels encadrés)

		Network of Coordinators besides the local education officers National day for the risk
Risk Awareness and Land Planning	Ministry of Sustainable Development	Establishment of risk prevention plans (PPR: plans de prévention des risques). National regulatory compliance of seismic risk prevention (seismic zones, earthquake-resistant construction rules) Checking of regulatory compliance
Mitigation	Ministry of Sustainable Development	Training of professionals (architects, engineers, tradesmen)
The preparation of the crisis	Ministry of the Interior (Home Office) Mayor	Depending on the scale, civil protection services or the Mayor prepare the crisis. See section 2.5.
Experience feed-back	The participants to the preparation of the emergency plans	Missions of disasters analysis : experience feed-back
Crisis management	Ministry of Interior (Prefect) Mayor Regional Council (fire fighters)	Mobilisation of means for response and recovery (state employees, public services, possibly army)
Compensation	Committee for natural disasters (Ministry of economy, Ministry of Sustainable Development, Ministry of Interior, Central reinsurance Agency)	Once the Order of Natural Disaster is taken, the insurances set up a specific compensation procedure

Table 5 Responsibilities of crisis management players (EPLFM document)

1.2.2 Monitoring and analytical support to policy making; R&D

The French State works to improve a global environment favourable to companies and to innovation, and to sustain the research and development effort (R&D) led within competitiveness clusters. Therefore, at the national or regional levels, it supports their research and development projects:

- By granting, via the Interministerial single fund (FUI: Fond Unique Interministériel), financial aids to the best R&D projects having an economical objective, via calls for projects; besides the financial aid of the State, the projects will benefit from aids from local authorities and community funds (ERDF: European Regional Development Fund).
- By setting specific or generic supports through the program for investment with prospects;

- By involving various partners: National Agency for Research (ANR: Agence Nationale de la Recherche), Public Bank for Investment (BPI France: Banque Publique d'Investissement), Deposit Office (Caisse des Dépôts).
- By facilitating the access to information on European programs to support innovation, through the European Enterprise Network (EEN) in particular.

Every year, the National Research Agency (ANR) launches a generic call for projects, open to all scientific fields and to all kinds of researches, from the most academic projects to applied researches carried out in the frame of partnerships with companies, SMEs (small and medium-sized enterprises) and SOHOs (single office/home office) in particular.

The scientific and thematic fields targeted by this call for projects and the financial instruments available are numerous and include regularly the theme of crisis management. This integrated tool is included in the frame fixed at French level by the strategic Agenda “France Europe 2020”.

Furthermore, to facilitate international collaborations, the ANR has concluded bilateral agreements with homologous agencies. The projects integrated in this frame (PRCI: Projets de Recherche Collaborative Internationale; International Collaborative Research Projects) are included in the generic call for projects but are submitted to a specific submission timetable.

Otherwise, all local authorities (city halls, prefectures, and region) can launch a request for proposals in research and development on the theme of crisis management depending on territorial needs.

1.2.3 Policy for Prevention

The French State guarantees the protection of the population and of the environment. Both at the departmental and regional level, State services work to prevent and manage natural and technological risks (natural risks, mining, technological, industrial and sanitary) and to guarantee population protection. The head office for risk prevention (DGPR: Direction Générale de la Prévention des Risques), is one of the seven specialised modules of the central office of the Ministry of Ecology, of Sustainable Development, of Transports and of Housing (5 head offices and 2 delegations of power) which includes various expertise in order to implement the policies stemming from the multiparty debate on the environment (Grenelle de l'Environnement¹⁰⁰¹).

The DGPR (head office for risk prevention) develops and implements the politics for the knowledge, assessment, prevention and reduction of technological, natural and hydraulic risks, risks linked to human activity, pollution and nuisances, as well as waste management. It also works on the nuclear safety and radioprotection policy, under the joint custody of the Minister of Sustainable Development, of the Minister of Industry and of the Minister of Health. Finally, its role of interministerial coordination is applied on matters of major risk prevention, on fight against noise and on waste management.

¹⁰⁰¹ http://www.side.developpement-durable.gouv.fr/userfiles/memento_maires.pdf

The prevention policy leans on the seven pillars of prevention, which complement each other, they are:

- knowledge of hazards and stakes;
- monitoring, forecast, awareness and warning;
- training and preventive information of citizens;
- monitoring of urban development and of building methods through regulations and plans for risk prevention;
- reduction of vulnerability;
- protection and planning of rescue teams;
- preparation to emergency situations by taking into account experience feedback.

This policy adapts and gets richer by fighting against oblivion and by analysing past crises.

1.2.4 Policy for Preparedness

When a phenomena starts, the best operational response must be given as quickly as possible (alert and information, emergency response, support). Each organisation, each participant to crisis management, previously and operationally prepares its response in terms of staff and means, with different tools and supports.

The policy of preparedness is based on plans at various levels:

- At the local level, from where the crisis starts, specific plans are set up by local authorities:
The local protection plan, (PCS: Plans Communaux de Sauvegarde¹⁰⁰²) organises the mobilisation of the resources of the municipality in case of civil protection events. It is mandatory for some municipalities exposed to localised major risks. At this local level, the Mayor can constitute a municipal civil protection reserve, used to protect people.
- At the inter-municipalities level, the specific intervention plan (PPI: Plan Particulier d'Intervention¹⁰⁰³) is a device defined in France to protect populations, goods and environment, to face specific risks linked to the existence of one or more industrial equipments. This PPI, designed and written by the public authorities, is part of the departmental ORSEC device.
- At the departmental level or zone level, the organisation of the civil protection response (ORSEC: Organisation de Reponse de Sécurité Civile¹⁰⁰⁴) worked out by the State, aim to prepare actors, in a preventive way, to the management of natural and technological risks

1.2.5 Policy for Response

« The political and strategic leadership for response to major crisis is given by the President of the Republic and by the Prime Minister. They provide the impulse and political decisions during a crisis. They must be able to rely on commandment means adapted to major crises, enabling

¹⁰⁰² http://www.mementodumaire.net/wp-content/uploads/2012/07/Guide_PCS.pdf

¹⁰⁰³ www.interieur.gouv.fr/content/download/36242/.../plaquette%20PPI.pdf

¹⁰⁰⁴ <http://www.interieur.gouv.fr/Le-ministere/Securite-civile/Documentation-technique/Planification-et-exercices-de-Securite-civile>

them to be informed in real time on the crisis and to steer government communication. This organisation must be known by the public, media and by the different interveners in France and abroad. It will be the natural entry point into the crisis management device for European and International high level interlocutors. »

Extract from the White Paper on Defense and National Security¹⁰⁰⁵ (p.192)

The political and strategic leadership of the crisis is based upon a crisis unit, permanently activated at the Hotel de Matignon in the occurrence of a crisis. This unit is under the authority of a member of the cabinet of the Prime Minister. The General Secretariat of defence and national security is in charge of office duties.

The crisis unit of the Prime Minister oversees strategic crisis steering and is in permanent liaison with the minister in charge of operational action enforcement.

The composition of the crisis unit is not rigid but adapted to the specifics of each crisis.

The Prime Minister is in charge of steering the operational aspects of a crisis on the national territory. In this respect, the Directorate of National Security Planning (DPSN: Direction de Planification de Sécurité Nationale) manages the Interministerial Crisis Centre located Place Beauvau. This centre guarantees the transmission of information to the political and strategic leaders of the crisis (President of the Republic and Prime Minister) and to the Ministry of the Interior. It suggests strategic decisions to the political and strategic leaders of the crisis (DPSC), guarantees interministerial operational continuity through the operational centres of the ministries and elaborates in close collaboration with the DPSC the crisis communication strategy.

If the crisis is restricted to the departmental or zone level, the prefect will be the director of rescue operations and will determine the strategic axes for crisis management. His objective is: « return to the normal situation as fast as possible and in the best conditions ». He can mobilise the whole of public and private means.

If the crisis is restricted to the municipality level, the Mayor, with his police power, is the director of rescue operations.

1.2.6 Policy for Relief and Recovery

Emergency planning is defined by the DGSCGC within the Ministry of Interior. Depending on the extent of the disaster, in addition to emergency professionals, different actors can be mobilised on different levels, in the public and private domains. Indeed, state services, rescue services, territorial authorities, network operators (telecommunications, electricity, transport, water), associations, and operators of classified sites can intervene.

The involvement of territorial authorities is very important because they have increasing human and material resources and they have good field knowledge. Regarding defence and national security, the cooperation between civilians and militaries remains a major asset. Finally, it seems essential to integrate the citizen into the crisis management system to favour risk awareness so he can play an active role. This would strengthen the resilience capacity of a population.

¹⁰⁰⁵ <http://www.defense.gouv.fr/actualites/la-reforme/livre-blanc-2013>

During a disaster, France is divided into four territorial levels:

- The local level;
- The departmental level;
- The zone level;
- The national level.

In order to efficiently perform their functions and to be properly informed all the authorities concerned have, at these different levels, all the respective commandment structures.

In a crisis management situation, the roles are well defined.

The Director of rescue operations (DOS: Directeur des Opérations de Secours) determines the strategic axes for crisis management. His objective is: « return to the normal situation as fast as possible and in the best conditions ». He can mobilise the whole of public and private means.

During events on his municipality, the Mayor, with his police power, is the DOS. In larger crises, the Prefect is the DOS, and if he is absent, this function can be taken on an interim basis by the Prefect's Chief of staff.

The director of the Departmental Fire and Rescue Services (SDIS Director) is usually the Incident Commander (COS: Commandant des Opérations de Secours), but this role can be carried out by the Departmental Director of Public Security (DDSP: Directeur Départemental de la Sécurité Publique) for an internal security crisis. Under the authority of the DOS, he carries out, on the accident site, the coordination of all public, private or associative rescue means, to accomplish rescue operations.

This commanding unit (DOS/COS), articulated between a strategic and a more operational level, allows the coherence of operations and constitutes one of the first fundamental principles as well as a specificity of the French Civil Protection.

The recovery policy concerns two different topics:

- Once relief and rescue operations are completed, crisis management actors must evaluate, establish damage extent, observe what happened, understand the causes and the spatial and time evolution of the disaster, but also the strengths and weaknesses of the relief device that was applied. These findings allow to establish and to carry out management plans, repairs and improvements. For this, the office of planning, exercises and feedback is responsible, pursuant to Decree ORSEC of 13 September 2005¹⁰⁰⁶, of ensuring the synthesis and dissemination of lessons learned made under the authority of the representative of the state after any resort to the ORSEC device. Since 2010, the ORSEC portal is the instrument of feedback transmission. It is interesting to note that this tool is every year more and better used.
- Repair and compensation which go through the following steps:
 - Compensate
 - Repair
 - Finance

¹⁰⁰⁶ <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000421070>

- Perform the work

1.3 Financing

1.3.1 Investing in preparedness

Each institution participates with its own funds and according to their policy to the preparation of rescue operations and response. Financing can be from national or local (region, department, municipal...) sources.

The SDIS, for example, are autonomous administrative public entities and have an annual budget voted by the board of directors. The income (investment and operating) mainly originates from the following contributions: municipalities, inter-municipal public entities (EPCI), General Council (Conseil Général) and State (mainly investment aid funds – FAI).

Companies invest in prevention, preparation and rescue actions according to their safety policy and regulatory or legislative constraints.

For natural disasters, the Barnier funds have been planned. Created in 1995, the aim of these funds for the Prevention of Major Natural Disasters (FPRNM)¹⁰⁰⁷ was to finance the expropriation of assets exposed to natural hazards and representing a serious risk for human life. It is financed in part by insurance premiums for natural disasters. In 2005, its purpose was extended to:

- amicable purchase by the State, municipalities or groups of municipalities of assets strongly damaged by a natural disaster,
- actions to reduce vulnerability listed in a risk prevention plan (PPRN¹⁰⁰⁸) for assets positioned in risk areas,
- prevention studies and contractor works for local authorities having a PPRN plan.

1.3.2 Investing in consequence management

Each institution participates with its own funds to rescue operations. In France, free rescue is the principle and the cost must not be covered by the people who are rescued.

- The SDIS are in charge of the direct rescue and emergency operations expenses ;

¹⁰⁰⁷ http://www.cepri.net/tl_files/pdf/circulaire2007fondsbarrier.pdf

¹⁰⁰⁸ http://www.performance-publique.budget.gouv.fr/sites/performance_publique/files/farandole/ressources/2015/pap/pdf/jaunes/jaune2015_risques_naturels.pdf

- Municipalities finance expenses for immediate population needs (food, emergency accommodation, psycho-medical assistance, cleaning of streets...). The expenses for personnel and equipment of the SDIS are mandatory.
- The State pays for expenses linked to public and private means coming from outside the department (salaries, transport, personnel accommodation and subsistence, replacement of destroyed equipment...).

Insurances also finance part of the recovery with the Natural Disaster Fund. Indeed, in France there is a principle of solidarity and equality. This principle is applied to natural disasters.

Law n°82-600 of 13 July 1982¹⁰⁰⁹ promulgates the texts for the compensation of victims of natural disasters.

Any person having an insurance contract for property damage pays an insurance premium according to the chosen guarantees and capital. An undifferentiated extra premium, regardless risk type and exposure to natural hazard, is determined by the State and represents a percentage of the insurance fee: extra premium of 12% for house insurance and 6% for a car insurance contract.

The natural disaster condition is declared through the publication of a ministerial decree decided by an Interministerial Commission. The expenses are divided between the insurance and the insurance reinsurance fund (CCR – Fond de reassurance des Assurances). If the expenses are very high and exceed the CCR capacity, the State is called as a guarantee.

Finally, law n°95-101 of 2 February 1995¹⁰¹⁰ concerning environment protection, states the polluter-pays principle. Expenses resulting from pollution prevention, reduction and fight must be paid by the polluter.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

In general, post-disaster assessment begins when the emergency services involved in crisis management leave from the disaster area. Of course, the transition from an emergency phase to the post-disaster phase is difficult to define. In any case, the emergency services will still have to participate in the early phase of post disaster.

We can therefore distinguish two steps in the post-disaster assessment: the short term one (post disaster) and the long term one (recovery & reconstruction). The post disaster may be a relatively short phase, covering the period between the withdrawal of services who managed the emergency phase and the beginning of the development of a device to handle reconstruction. This period can vary from several days to several months.

The reconstruction period that follows is much longer and can last several years. Themes of the post-disaster management can be grouped under the following framework:

¹⁰⁰⁹ <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000691989>

¹⁰¹⁰ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000551804>

- Supporting people
- Evaluation and reporting of damage
- The administration of reconstruction
- The reconstruction
- The feedback.

1.4.2 Departmental Lessons Learned systems

Law No. 2004-811 of 13 August 2004¹⁰¹¹ on the modernization of the civil protection emphasises the need to improve the ORSEC plan by conducting exercises and feedback (lessons learned). This allows actors of crisis management (firefighters, SAMU, police officers, etc.) to better know each other and develop good habits; the feedback allows learning real or simulated accidents through those exercises. For large crisis (example, German Wings aircrash), there is always a Retex (retour d'expérience: feedback) report on what happened on how it was managed, and what could be improved.

The minister in charge of Civil Protection must disseminate the results as widely as possible. A methodological guide is available to apply the lesson learned systems.

At the local level, lessons learned process is conducted by the prefect. A meeting is organised with all the involved institutions. The mayor, having a major role in the post disaster phase can be supported by civil protection associations to support victims. As an example, the Specific Intervention Plans include general regulations to proceed to environment cleaning after a technological accident.

1.4.3 Centralised (national) Lessons Learned system

- Is there a centralised (national) Lessons Learned system (state/federal level)? If so, which is the responsible agency? How stakeholders exchange information about problems and success in previous events?

At the national level, this system is applied by Interministerial or parliamentary committees. The Ministry has specific structures and personnel in charge of elaborating the feedback system. The framework is the following:

- Gathering and analysing the data related to the disaster
- Setting up expertise groups participating to the definition of policies for prevention purposes.
- Disseminating the lessons learned from previous disaster analyses (in France or abroad)

At the moment, the lessons learned system is more focused on prevention and response and recovery management than on post disaster management. For this last problem, regulations mainly cover the compensation of victims through law n°82-600 of 13 July 1982¹⁰¹², creating the CATNAT

¹⁰¹¹ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000804612&categorieLien=id>

¹⁰¹² <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000691989>

system (Natural disaster) and law n°2003-699 of 30 July 2003¹⁰¹³ and its application decree n°2005-1466 of 28 November 2005¹⁰¹⁴, creating the CAT-TECH device (Technological disaster).

- How is the system connected or planned to be connected to efforts at EU-level (i.e. DG ECHO lessons learned system)?

DGF ECHO organises *lessons learned* meetings for all the emergencies under the umbrella of the Civil Protection Mechanism. The French national civil protection focal point (an officer from the Ministry of the Interior) is invited by DG ECHO to participate at a lesson learned session that follows each activation of the EU Civil Protection Mechanism for a real crisis or for an exercise. For example, this was the case for the Croatia floods in 2014.

1.4.4 International exchange for Lessons Learned

After an international crisis, a lesson learnt session is organised by OCHA. If French rescue forces were involved in the crisis, the French representative (from the Ministry of the Interior or Ministry of Foreign Affairs) participates to this session, where the lessons learnt by the French forces are presented and discussed.

This was the case of the lessons learnt from UsAR procedures applied during the Haiti earthquake (Etude en temps réel de la gestion de la crise en Haïti après le séisme du 12 janvier 2010, groupe URD, Etude financée par la Délégation aux Affaires Stratégiques du Ministère de la Défense).

1.4.5 Regular policy reviews

The lessons learned process is primarily devoted to highlight the required areas of improvements. At the end of the lessons learned process, actions, associated to a schedule are proposed. Until now, lessons learned from previous disasters allowed numerous prefectures to set up structures improving civil protection events:

- Public information unit
- COD operating regulations
- ...

Those areas for improvement can be concerned by the correction of deficiencies observed during the crisis, but also in the promotion of attitudes and behaviours of organisations that have proven to be effective by reducing the impact of the crisis.

1.5 Resilience

- Does the country/IO implement the concept of resilience? If yes, please describe how it fits into the crisis management ecosystem

¹⁰¹³ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000604335>

¹⁰¹⁴ <http://www.legifrance.gouv.fr/eli/decret/2005/11/28/ECOT0591227D/jo/texte>

The White Paper (2008 and 2013)¹⁰¹⁵ on defence and national security defines resilience as "the willingness and the ability of a country, society and government to withstand the consequences of an attack or major disaster, and to quickly restore their ability to work normally or at least in a socially acceptable mode."

In France, due to the increase of disaster frequency such as floods, regulatory and legislative measures have been taken. Can be listed, for example:

- Law No. 87-565 of 22 July 1987¹⁰¹⁶ organising civil protection and major risks prevention, creating the right to information.
- Law No. 95-101 of 2 February 1995¹⁰¹⁷ on strengthening environment protection, called "Loi Barnier."
- Law No. 2003-699 of 30 July 2003¹⁰¹⁸ on technological and natural risks prevention and on damage repair.
- Law No. 2004-811 of 13 August 2004¹⁰¹⁹ on the modernization of civil protection.

These laws were enacted by the state following the increase of major disasters and life loss occurrence. Following feedbacks from major crises, these laws mainly allow strengthening the evaluation and alert capacities of authorities. And emergency works can be carried out to ensure a faster return to normal.

There are two trends in the concept of resilience: reactive resilience to short-term and proactive resilience to long-term. The provisions to overcome a crisis are on the one hand the static vision of resilience (reactive resilience to short-term) with the ability to return to the original condition. It is an idea of a rapid return to the initial equilibrium (engineering resilience). And on the other hand, a dynamic vision of resilience (proactive resilience to long-term) which is the ability of a system to adapt, transform or to change direction to reach a new equilibrium (ecological resilience).

In France, the methods used in risk management and supported by competent authorities remain much focused on engineering resilience which is based on the return time of a system to equilibrium or to normal after trauma.

Source: http://geographie.ens.fr/IMG/file/resilience/Quenault_presentation.pdf

- Do CM organisation, local community and private business apply related standards, e.g. ISO 22301 "Business Continuity Management - Requirements" or any other (formal or industrial) standards? Please specify.

In 2013, the Department of Defence and National Security established a guide to elaborate a plan for business continuity (PBC) for State organisations, local communities and private businesses. PBC is mandatory for State organisations, but not for local communities. In this guide, all notions of compliance refer to the ISO 22301 standard.

¹⁰¹⁵ <http://www.defense.gouv.fr/actualites/la-reforme/livre-blanc-2013>

¹⁰¹⁶ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000508820&dateTexte=>

¹⁰¹⁷ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000551804>

¹⁰¹⁸ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000604335>

¹⁰¹⁹ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000804612&categorieLien=id>

In France, various industrial groups and companies participated with AFNOR (French Association for Standardisation) certification body, to the elaboration of the Annual Full NF X50-259 relative to crisis management and which partly meets the requirements of the ISO 22301 standard on the "management system of the business continuity".

(Guide pour réaliser un plan de continuité¹⁰²⁰, Secrétariat Général de la Défense et de la Sécurité Nationale, 2013)

1.6 Information sharing and data protection

1.6.1 Data protection and Information sharing in Crisis Management

- The sharing of personal data during crises [in 'extreme cases'] or for crisis management purposes, e.g. data on people with particular disabilities .

Created in 1978 in France, the CNIL (Commission Nationale Informatique et Liberté: National Commission for Computing and Freedom) is an independent administrative body that operates in accordance with the data protection legislation of 6 January 1978¹⁰²¹ as amended on the 6 August 2004¹⁰²². The independence of the CNIL is guaranteed by its composition and organisation.

The CNIL has been entrusted with the general duty to inform people on the rights that the data protection legislation gives them. It tries to reach out to the general public, either through the press, its internet site, social network sites or by providing teaching tools.

Concerning personal data protection during crises, a specific deliberation was adopted to dispense the declaration of personnel data treatment of people involved in crisis management. It is proceeding n° 2012-389 of 8 November 2012¹⁰²³.

- The sharing of classified information (internally and with third states/ organisations), e.g. data about specific vulnerabilities or about terrorist threats.

In October 2009, the CNIL established two decrees, establishing personal data processing for crimes against public security on date of 16 October 2009 and published in the Official Journal of 18 October 2009¹⁰²⁴. They concern "people whose individual or collective activity indicates that they may affect public safety". This includes "collecting, storing and analyzing information regarding the persons who may be involved in collective acts of violence, particularly in urban areas or during sporting events".

The Office of the Ombudsperson was created by Security Council resolution 1904, adopted on 17 December 2009, and its mandate was extended by resolution 1989, adopted on 17 June 2011, by resolution 2083, adopted on 17 December 2012, and by resolution 2161, adopted on 17 June 2014. It

¹⁰²⁰ http://www.sgdsn.gouv.fr/IMG/pdf/Guide_PCA_SGDSN_110613_normal.pdf

¹⁰²¹ http://www.sgdsn.gouv.fr/IMG/pdf/Guide_PCA_SGDSN_110613_normal.pdf

¹⁰²² <http://www.legifrance.gouv.fr/eli/loi/2004/8/6/JUSX0100026L/jo>

¹⁰²³ <http://www.cnil.fr/documentation/deliberations/deliberation/delib/284/>

¹⁰²⁴ http://www.cnil.fr/fileadmin/documents/en/CNIL-30e_rapport_2009-EN.pdf

has formal agreements and arrangements in place to access Confidential/Classified/Sensitive Information. As well, some States have been willing to share such information on an ad hoc basis without either an arrangement or agreement. France signed an agreement on 15 May 2012¹⁰²⁵.

1.6.2 Voluntary Organisation Databases

There is a web site (www.secourisme.net) where all the voluntary organisations involved in crisis management are listed. Each association or organisation employing volunteers is required to prepare an annual capacity list for the various jobs requiring a national training (instructor, rescuer,...). This list must be communicated to the local prefect.

1.6.3 Social media and crisis management

No official plan or procedure exists concerning data gathering from social media during crisis. Nevertheless, two actions have been undertaken by two defence zones (East and South), during the last two catastrophic flood episodes that occurred in November 2014 in the South of France (Lamalou and Ales, Gard Department). A lot of information was acquired from social networks during the floods and transmitted to the French DGSCGC. Please see section 4.4 for further information.

International volunteers supporting virtual operations (VISOV) were grouped in a non-profit organisation providing technical, methodological and operational support reinforcements during actions on Social Media in Emergency Management (SMEM).

One person involved belongs to the National Operational Crisis Management Centre, and has created a specific monitoring and analysis unit. Some initiatives are taken by ENTENTE/ENSOSP on this topic and in November 2014 has been organised a specific workshop in the South of France. The objective was to create a working group on this topic and to officially develop this activity in France.

¹⁰²⁵ <http://www.franceonu.org/15-May-2012-Security-Council-6246>

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The ORSEC mechanism (Organisation of the Civil Defence Response) organises event management and crisis management. As it is modular and progressive, it can adapt to the type, scale and evolution of the event.

It includes the inventory and the analysis of the risks, an operational set-up answering this analysis and personnel preparation and training methods.

It organises the mobilisation, implementation and coordination of any public or private person participating to the general protection of populations.

According to the situation, the ORSEC mechanism can be used totally or only partially by the Department Prefect, the Zone Prefect or the Naval Prefect.

The circular n° NOR : INT/E/06/00120/C of 29 December 2006¹⁰²⁶ defines the ORSEC mechanism.

2.2 General crisis (emergency, disaster) management law

The White Book on the defence and national security¹⁰²⁷ assesses that the politic and strategic direction of the major crisis is under the authority of the President and the Prime Minister of the French Republic.

The Law 2004-811 of 13 August 2004 modernising Civil Protection¹⁰²⁸ has for objective to mobilise the whole competences implied in the prevention and organisation of the rescue regarding the technological, natural and terrorist risks.

The decrees that determine the ORSEC mechanism were established in 2005, 2006 and 2012¹⁰²⁹ are:

- Decree n°2005-1157 of 13 September 2005 related to the ORSEC mechanism (department, zone and sea).
- Circular N°NOR :INT/E/06/00120/C of 29 December 2006 defining the departmental ORSEC mechanism

¹⁰²⁶ [www.interieur.gouv.fr/content/download/8031/.../INTE0600120C .pdf](http://www.interieur.gouv.fr/content/download/8031/.../INTE0600120C.pdf)

¹⁰²⁷ « White Book on the defense and national security”, 2013, page 192: <http://www.defense.gouv.fr/actualites/la-reforme/livre-blanc-2013>

¹⁰²⁸ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000804612>.

¹⁰²⁹ <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000421070&dateTexte=&categorieLien=id>
<http://www.cedre.fr/fr/lutte/guide-elu/orsec06.pdf>
http://circulaires.legifrance.gouv.fr/pdf/2012/01/cir_34453.pdf

- Circular n°5567-SG of 2 January 2012¹⁰³⁰ : governmental organisation in case of major crisis management

Additional laws (CBRN cases):

- Circulars 007/SGDN/PSE/PPS of 8 October 2009¹⁰³¹ and 747/SGDN/PSE/PPS of 30 October 2009¹⁰³²: intervention doctrines when facing a CBRN terrorist threat or attack, defines interveners and State doctrine.
- The CBRN governmental plan 10135/SGDN/PSE/PPS CD of 16 September 2010¹⁰³³ : its aim is to provide a decision aid to the Prime Minister and to his ministers during CBRN threats and events.
- Circular 700/SGDN/PSE/PSS of 7 November 2008¹⁰³⁴ : urban chemical attack against civilian population and Circular 800/SGDN/PSE/PSS of 18 February 2011 on radioactive attacks.
- Circular 2002-119 of 29/05/2002¹⁰³⁵ : elaboration of a specific security plan against major risks for schools.
- Circular of 3 May 2002¹⁰³⁶: set up of an emergency preparedness plan (white plan) for every public health facility in order to cope with numerous victims.

2.3 Emergency rule

In case of major cross-industry crisis with a National impact, the Prime Minister can decide to activate a CIC (Interministerial Crisis Unit¹⁰³⁷) that merge the whole ministries affected by the event. He can decide to coordinate himself the Governmental action or to entrust it to a Minister depending on the event kind. In case of major crisis on the National territory, the Minister of Interior will ensure in principle the governmental coordination of this unit.

If the crisis is even more major, the European level can be engaged with the ERCC (Emergency Response Coordination Centre). “The EU is committed to providing disaster response in a timely and efficient manner and to ensure European assistance meets the real needs in the population affected, whether in Europe or beyond” from ECHO description of the ERCC¹⁰³⁸.

The ERCC’s role is to support a coordinated and quicker disaster response using resources from the Countries participating in the European Union civil Protection Mechanism.

In case of crisis such as terrorist attack where National security is threatened, the President of the French Republic can have extra power.

¹⁰³⁰ circulaires.legifrance.gouv.fr/pdf/2012/01/cir_34453.pdf

¹⁰³¹ circulaire.legifrance.gouv.fr/pdf/2009/11/cir_29828.pdf

¹⁰³² www.sgdsn.gouv.fr/IMG/pdf/circulaire_no_747_SGDN_PSE_PPS-2.pdf

¹⁰³³ www.sgdsn.gouv.fr/IMG/pdf/2011_02_18_800-2.pdf

¹⁰³⁴ www.sante.gouv.fr/IMG/pdf/cir_1349.pdf

¹⁰³⁵ circulaire.legifrance.gouv.fr/pdf/2009/04/cir_1809.pdf

¹⁰³⁶ www.sante.gouv.fr/IMG/pdf/circulaire_401_140906.pdf

¹⁰³⁷ http://www.sgdsn.gouv.fr/site_rubrique106.html

¹⁰³⁸ http://ec.europa.eu/echo/what/civil-protection/emergency-response-coordination-centre-ercc_en

The exceptional powers of the President or « powers of crisis » have been defined by the “Article 16 of the Constitution of the 5th Republic¹⁰³⁹”. This law allows the President to get hold of exceptional powers in case of major crisis.

The principle is that the President of the Republic takes the necessary measures required by the circumstances in case of crisis. However this competence is submitted to content and form conditions.

The first “content” conditions are that the integrity of the national territory, independency of the country or international engagements should be threatened in a serious and immediate way. The second “content” conditions are that the measures should have for objectives to ensure to the public powers the means to accomplish their mission.

In addition, “form” conditions apply. The President should consult the Prime Minister, the Presidents of the two Parliaments and the Constitutional Council and inform the country of the implementation of the Article 16.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Two circulars regulate the management of disaster and emergency in France.

- Circular n°5567-SG of 2 January 2012¹⁰⁴⁰: governmental organisation, major crisis management with the creation of an Interministerial Crisis Unit (Cellule Interministérielle de Crise) under the authority of the Prime Minister.
- Decree 2011-988 of 23 August 2011¹⁰⁴¹: created the General Directorate of Civil Protection and Crisis Management (Direction Générale de la Sécurité Civile et de la Gestion de Crise) as well as its organisation and attributions.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

2.5.1 Departmental level

The Departmental entity for emergency and disaster management are the SDIS.

- Law n°96 -369 of 3 May 1996¹⁰⁴² related to fire and rescue services, created in each department a public entity called SDIS which incorporates a departmental fire-fighter unit (professionals and

¹⁰³⁹ <http://www.vie-publique.fr/decouverte-institutions/institutions/approfondissements/pouvoirs-exceptionnels-du-president.html>

¹⁰⁴⁰ circulaires.legifrance.gouv.fr/pdf/2012/01/cir_34453.pdf

¹⁰⁴¹ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000024497281&categorieLien=id>

¹⁰⁴² <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000005620885>

volunteers) organised in brigades. The decree 97-1225 of 26 December 1997¹⁰⁴³ details the organisation mode of the SDIS.

Two kinds of fire fighters and rescue personnel exist: professional and volunteers:

- Decree 2013-412 of 17 May 2013¹⁰⁴⁴: concerns voluntary fire-fighters status updating.

A circular specifies the creation, organisation and functioning of the CODIS – CTA (Departmental Fire and rescue Operational Centre – Alert Treatment Centre).

- Circular of 24 July 1991¹⁰⁴⁵.

2.5.2 Local level

The Law 2004-811 of 13 August 2004¹⁰⁴⁶ modernising civil protection created the civil protection reserve with circular 2004-811 of 12 August 2005 which details the related arrangements. The aim of these reserves is to support civil protection services in case occur: events exceeding their usual capacities or specific types of events. The reserves participate to population assistance and are under the authority of the mayor.

The Article 13 of law n°2004-811 of 13 August 2004 establishes the local protection plan (PCS - Plan Communal de Sauvegarde). This local protection plan defines the basis of the local organisation (men, means, missions) that will enable to quickly react to an emergency. The decree of 13 September 2005 details the contents of this decision aid tool.

The Law 2007-294 of 5 March 2007¹⁰⁴⁷ related to the health system preparation created a health reserve unit in order to complete those set up by the state and by local authorities. This unit is constituted by professionals and by retired health professionals.

Please see section 4 for additional information.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The French state has several relays to develop risk culture and NGOs are among them.

France has ratified (law 98-1166 of 18 December 1998¹⁰⁴⁸) the European Convention on the recognition of the legal personality of International nongovernmental organisations.

¹⁰⁴³ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000569559&categorieLien=id>

¹⁰⁴⁴ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000027519941>

¹⁰⁴⁵ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000360939>

¹⁰⁴⁶ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000804612&categorieLien=id>

¹⁰⁴⁷ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000461266&categorieLien=id>

¹⁰⁴⁸ <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000208976>

A nongovernmental organisation (NGO) is a public interest organisation which is neither part of a State or of an International institution. NGOs do not have the status of an International law subject. An NGO is a non-profit organisation.

It is usual to keep the term for non-profit legal entities financed by private funds.

Article 1 of the law of 1901 defines the association as a « convention through which two or several people put in common, permanently, their knowledge or activity in a purpose different to sharing profits ».

In France, the association law is a branch of private law ruled by the Civil Code and by the law of 1 July 1901 which regulates the functioning of French associations. Law n°82-1169 of 31 December 1982¹⁰⁴⁹ concerning the administrative organisation of the cities of Paris, Marseille and Lyon and of intermunicipal (between cities) public entities plans that associations can participate in city activities if they make the request. When this is the case, town halls provide dedicated advertising boards.

The National Council of Association Life was created by the decree of 25 February 1983.

The circular of 22 December 1999 sets up departmental delegates for associative life (DDVA). Their task is to accompany the development of associations and their daily management.

In order to assist the prime Minister, decree n°2001-865¹⁰⁵⁰ of 21 September 2001, created a permanent group in charge of guaranteeing dialogue between public authorities and associations for all aspects of associative life.

Two types of personnel are present in associations:

- Employees: this status is characterised by two necessary and sufficient conditions :
 - Work paid through a salary, housing, car or flat-rate.
 - Existence of a subordination relationship. The Court of Cassation stipulates that it is the link characterised by work carried out under the authority of an employer who provides instructions, orders and controls work program with the ability to punish the failures of his subordinate.
- Volunteers: freely participate and receive no payment. The volunteer has no social protection in case of an accident but the civil responsibility of the association can be searched. The laws of 17 January 1986 and of 17 January 1986 give employees who are voluntary members of an association time-off in order to represent their association in all state authorities listed by law.

Responsibility of the association and of its leaders:

An association is a legal entity governed by private law. Most legal disputes fall within the jurisdiction of judicial courts except for disputes related to trade. In this case they fall within the jurisdiction of the Commercial Court or administrative courts if the dispute occurs between an association and a public entity.

As a legal entity, the association can incur liability:

¹⁰⁴⁹ <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000880033>

¹⁰⁵⁰ https://fr.wikipedia.org/wiki/Droit_des_associations_en_France

➤ Civil justice

An association, as a legal entity, is liable if the decisions are taken by the members of the governing body or by members of the board. This responsibility is extended to members and to third parties acting on their own, in case of serious personal misconduct or authority overstepping. For example, failure to respect a general obligation having caused damage not covered by insurance. However, unlike for penal responsibility, some damages can be covered by insurances.

➤ Criminal justice

The association can be liable on criminal aspects if it commits acts punished by criminal law such as involuntary or negligent manslaughter, embezzlement, forgery etc...

As a physical person, a manager can be held liable.

Administrators can be personally prosecuted:

- for civil matters : non-compliance to statutory obligations, authority overstepping, damage caused to third party, bankruptcy and liquidation of assets in case of mismanagement or negligence to respecting legal, social or fiscal obligations.
- for criminal matters : can be criminally liable if he/she is responsible for the offence.

2.7 Legal regulations for international engagements of first responders and crisis managers

The French international engagements towards countries affected by catastrophic events are mainly regulated by European laws. The following EUROPEAN texts regulate the different actions undertaken.

- Council Regulation (CE) no 1257/96 of 20 June 1996¹⁰⁵¹ on humanitarian aid.
- Council Decision 1999/847/CE of 9 December 1999¹⁰⁵² providing a community action program in the field of civil protection.
- Council Decision 2001/792/CE of 23 October 2001¹⁰⁵³ establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions.
- Commission decision of 29 December 2003 laying down rules for the implementation of Council decision 2001/792/EC, Euratom establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions. (Modified by Commission Decision of 20 December 2007 n°2007/779/CE and Commission Decision of 29 July 2010 n°2010/481/UE).

¹⁰⁵¹ <http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:31996R1257>

¹⁰⁵² <http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=URISERV:l28081>

¹⁰⁵³ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32001D0792>

- Council Decision 2007/779/EC¹⁰⁵⁴, Euratom of 8 November 2007 establishing a Community Civil Protection Mechanism.
- Council Decision 2007/162/CE¹⁰⁵⁵, Euratom of 5 march 2007 establishing a civil protection financial instrument.
- Decision No 1313/2013/EU¹⁰⁵⁶ of the European Parliament and of the council of 17 December 2013 on a Union Civil Protection Mechanism.

¹⁰⁵⁴ <http://eur-lex.europa.eu/legal-content/FR/ALL/?uri=CELEX:32007D0779%2801%29>

¹⁰⁵⁵ <http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex:32007D0162>

¹⁰⁵⁶ http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=uriserv:OJ.L_.2013.347.01.0924.01.FRA

3 Organisation

3.1 Organisational chart

- National/ IO authority for emergency and disaster management; chain of command and high-level decision-making

In the event of a major disaster, the Prime Minister is the head of the upper conducting operations. Operations are coordinated with the other ministries.

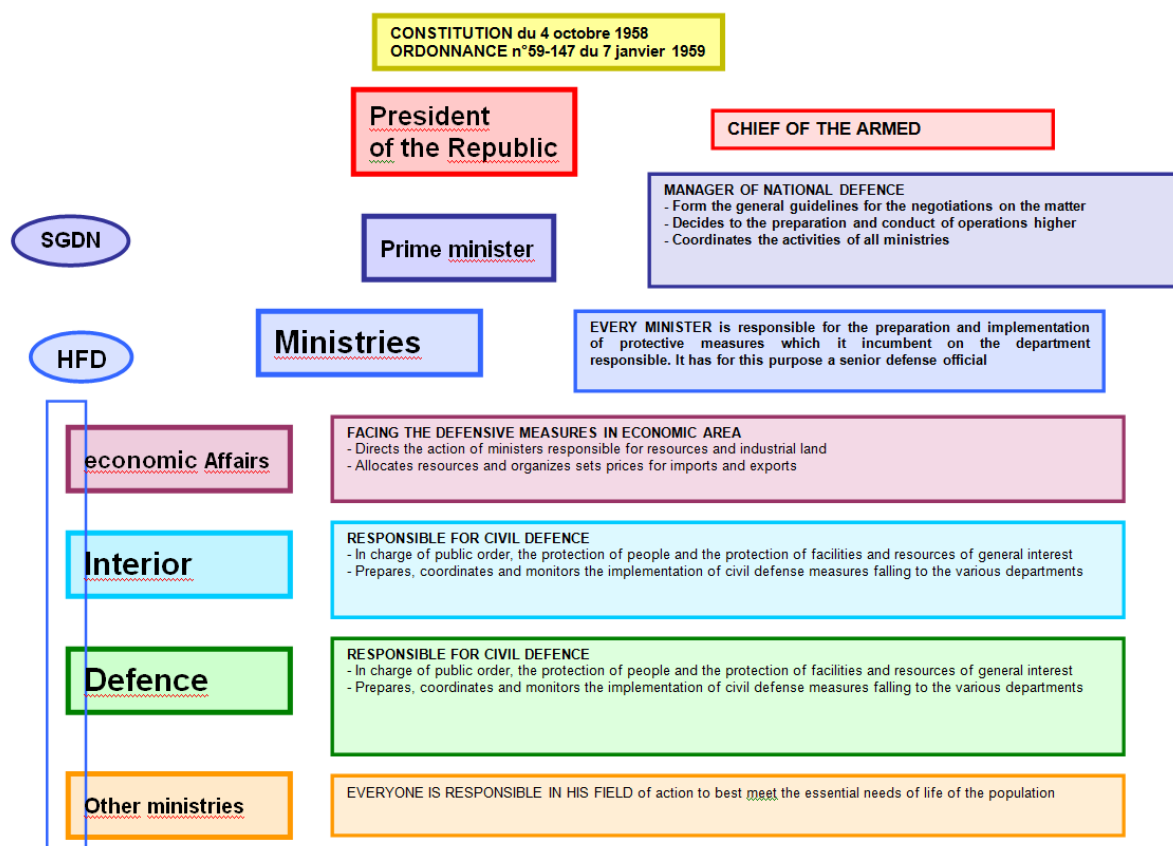


Figure 12: Authority Powers at the Central Level (EPLFM)

There are four levels:

- ✓ national level;
- ✓ zone level;
- ✓ departmental level;
- ✓ local level

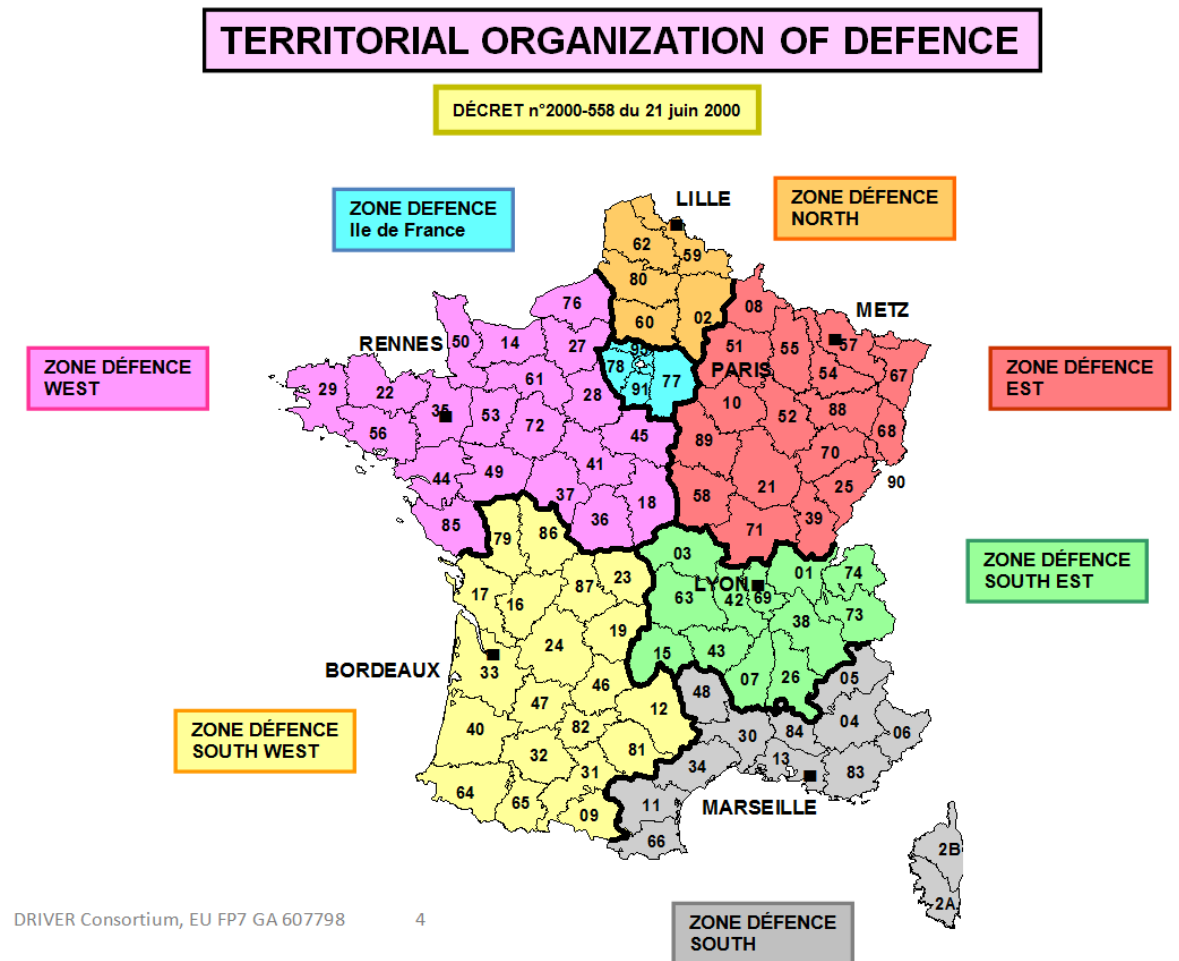


Figure 13: Territorial Organization for Defence (EPLFL document)

France has a comprehensive approach of crisis management, which is why all ministries are involved.

However, in most cases only the Ministry of the Interior, (possibly the Department of Defence) needs to be activated.

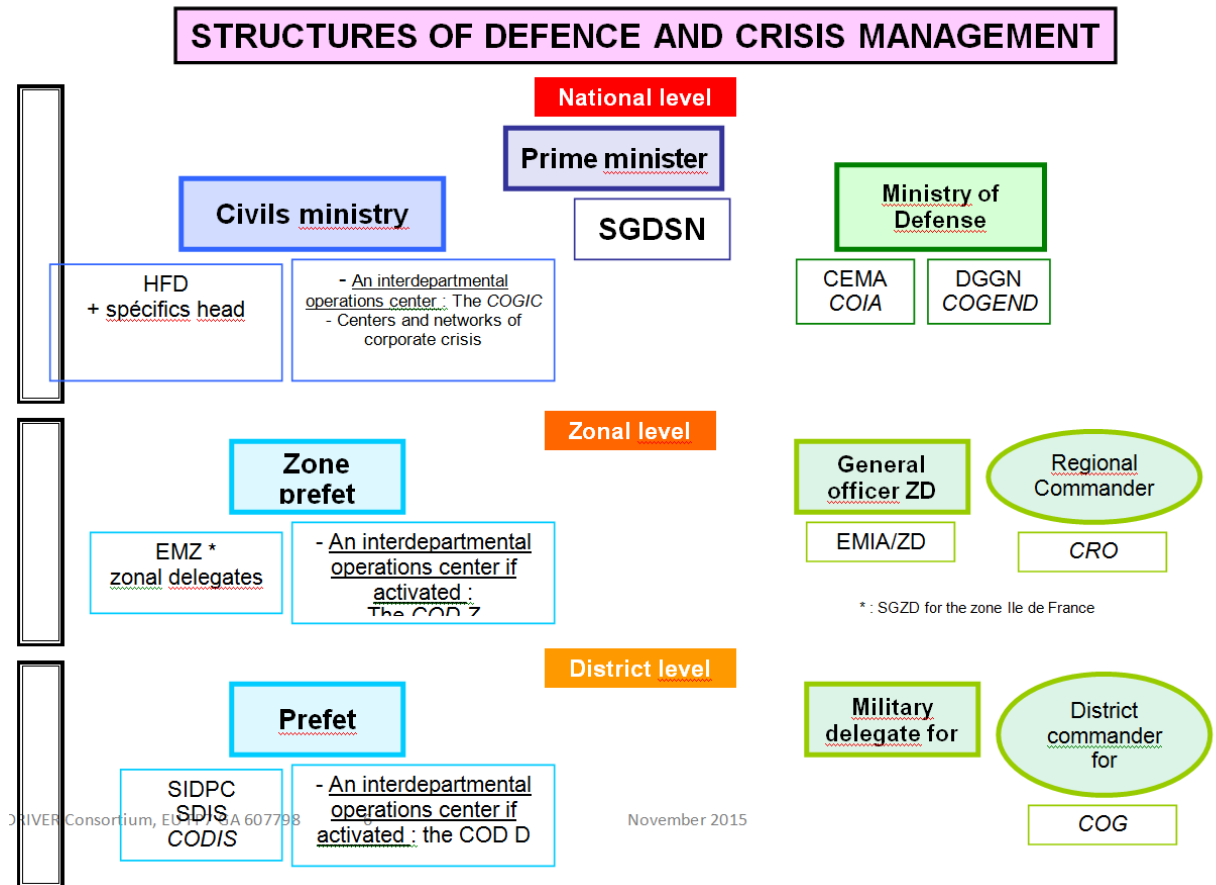


Figure 14: Structures for Defence and Crisis Management (EPLFM document)

- National permanent emergency and disaster management unit(s)/ formations; first responders

For crisis management and civil protection, the government and the Minister of the Interior have the Interministerial Crisis Management Operating Centre (COGIC) which is the operational organisation managing crises at the Directorate-General for Civil Protection.

The COGIC can activate in response to crises the following national means:

- ✓ military civil protection units (FORMISC);
- ✓ water bomber aircrafts;
- ✓ helicopters;
- ✓ logistic Bases (ESOL);
- ✓ bomb-disposal expert.

In constant contact with the operational centre of the National Police and the Planning and Conduct of Operations Centre (CPCO) of the Department of Defence, the COGIC continuously informs the minister's office, offers intervention procedures, prepares and coordinates the action of government interventions.

The centre occupies a total area of 500 m², divided into several structures:

- ✓ an operational centre dedicated to continuous monitoring, (24/7), defence and civil protection;
- ✓ a crisis centre, activated when needed;
- ✓ a communications centre, plays a key role in informing the public through the pre-established national alert network links with key national media;
- ✓ a documentation centre.

A total of 40 officers and non-commissioned members maintain the COGIC.

- Planned/ anticipated use of specialised military assets

During the summer season, there is an agreement between the Ministry of Defence and the Ministry of Interior for the provision of specialised assets and means (helicopters, engineer assets, etc).

On the other hand, Prefects may, at any time, requisition military means to deal with unusual disasters.

- Regional authorities and arrangements for emergency and disaster management (e.g. crisis HQ)

The intermediate level is the zone level. There are 7 areas of defence and therefore 7 inter-ministerial Defence Zones (EMIZ).

The EMIZ has an operational centre.

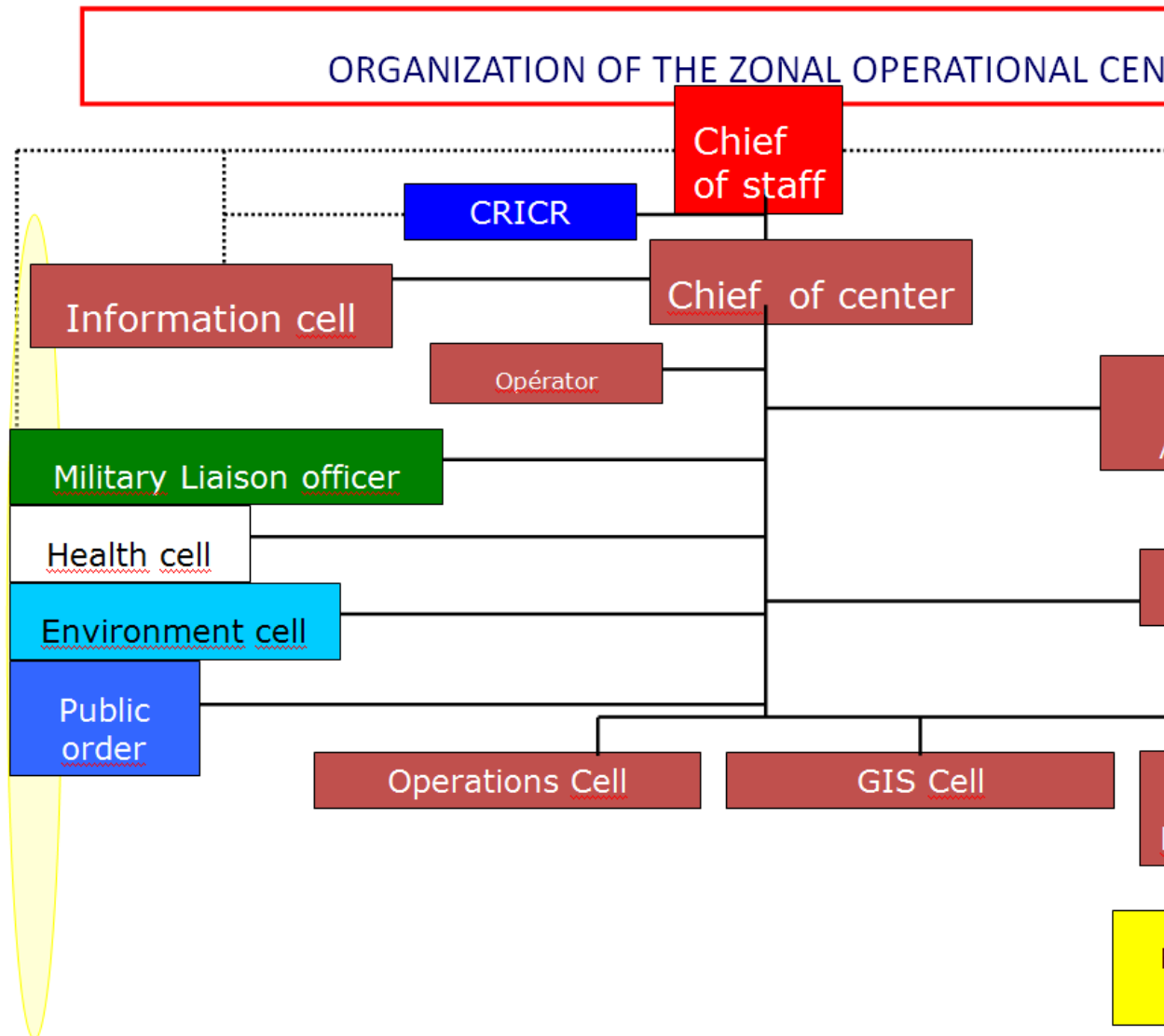


Figure 15: Organisation of the Zone Operational Centre (EPLFM Document)

- Departmental emergency and disaster management arrangements

All French departments have an operational centre or crisis unit (CODIS). Some are not activated 24/7. When there is a disagreement between some departments, it is the Prime Minister who arbitrates.

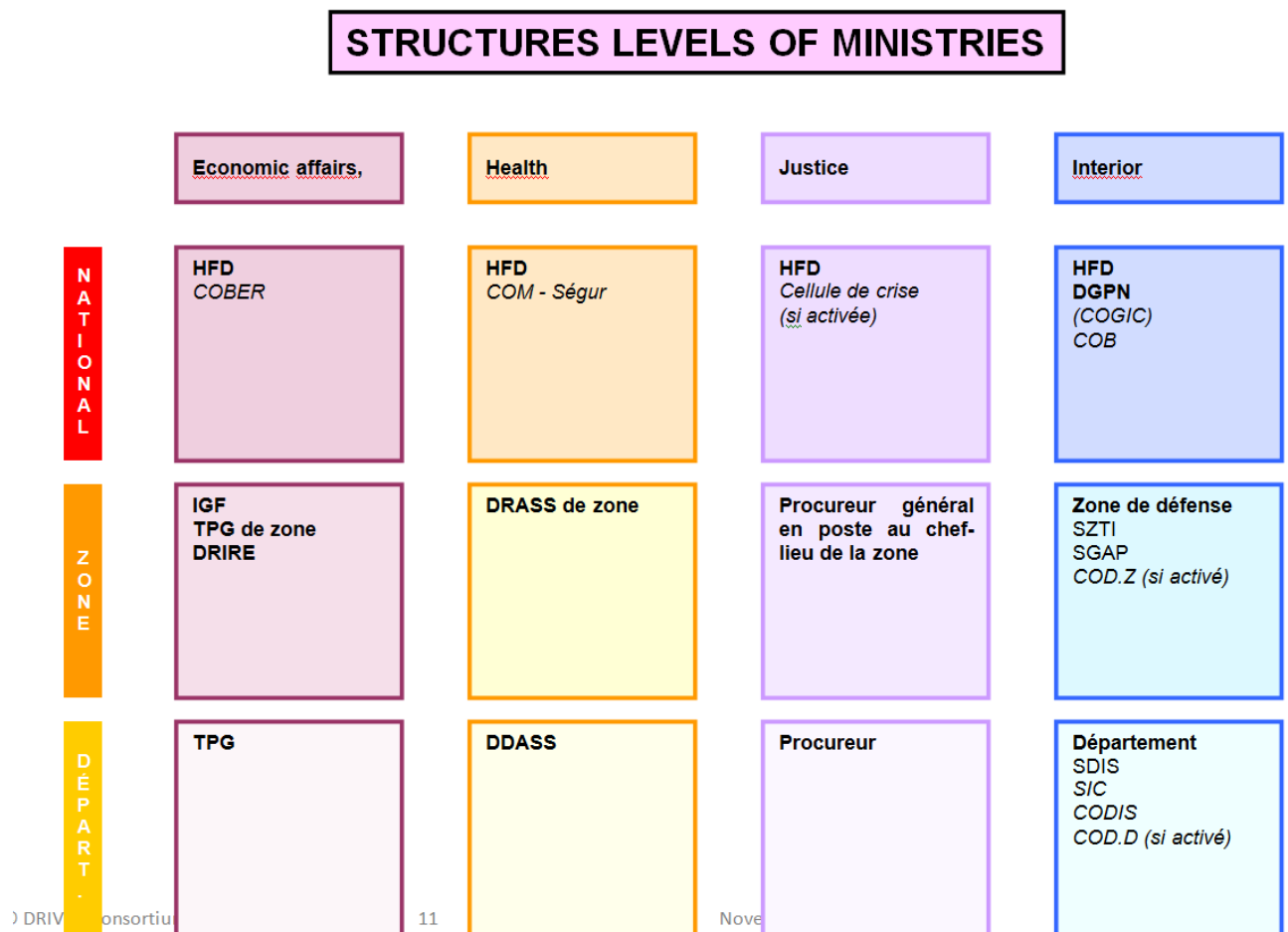


Figure 16: Structure Levels of Ministries (part 1, EPLFM document)

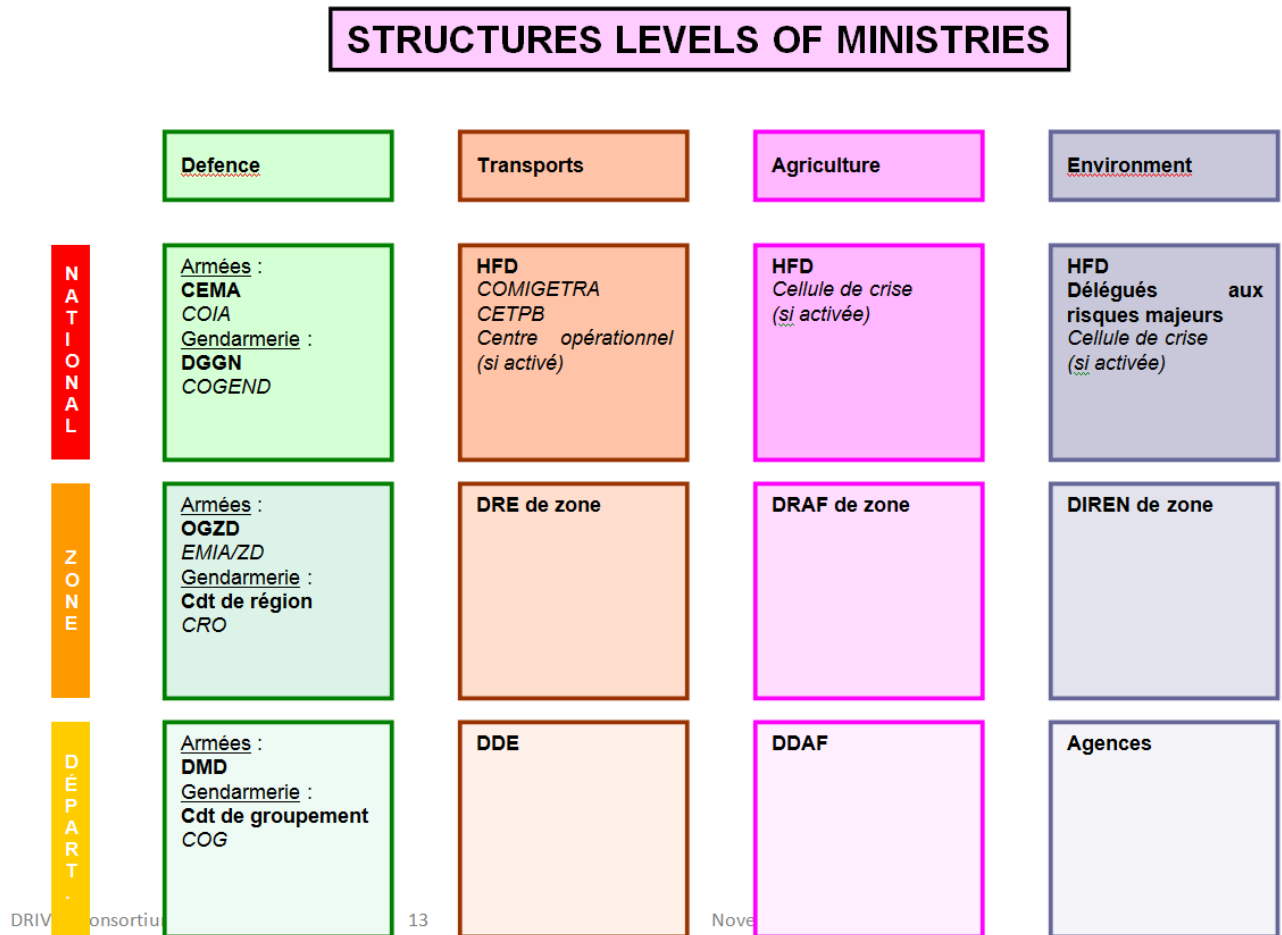


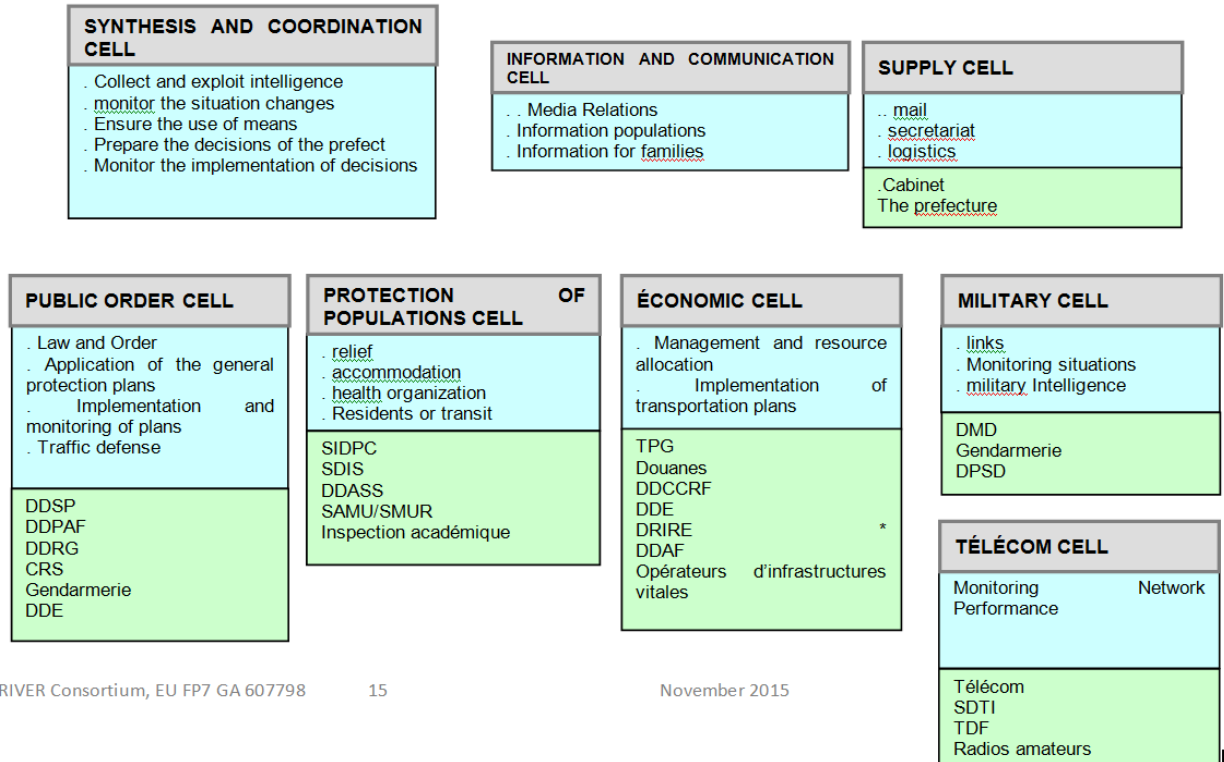
Figure 17: Structure Levels of Ministries (part 2, EPLFM document))

- Local (municipal, town) authorities and arrangements for emergency and disaster management

At the level of the department, the Prefect manages the crisis in a specific operational centre: the Departmental Operational Centre “COD”.

ORGANIZATION OF THE DEPARTEMENTAL COMMAND POST

PREFET



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15

November 2015

Figure 18: Organisation of the Departmental Command Post (EPLFM document)

- Volunteers and volunteer organisations; specialised NGOs

In order to work and to be integrated into an emergency device, NGOs must receive an agreement from the DGSCGC.

- Private businesses

They can be requisitioned by the Prefet as needed.

3.2 Organisational cooperation

- Operational cooperation (e.g., coordinated CM operations planning and response at national level, cross-border operational cooperation, operational cooperation within the EU)
 - How priorities are assigned in the case of simultaneous occurrence of events?

In France, the priorities are guided and determined by the issues and they are:

- ✓ population;
- ✓ property;
- ✓ economic activities;
- ✓ damage to the environment.

- How cross-border collaboration is organised? Please identify procedures used by stakeholders for cross-border cooperation (e.g., how is it initiated)

For small operations there are agreements of the Prefects.

For larger operations involving the work of other departments or national resources, the decision falls within the Ministries of the Interior and of Foreign Affairs.

4 Procedures

See section 3 for additional information.

4.1 Standing Operating Procedures (SOPs) and Guidelines

- Is there a written/ published document(s)?

There are standard operating procedures and guidelines¹⁰⁵⁷. These are published by the DGSCGC. The command organization is taught at all levels. The officer's School¹⁰⁵⁸ of Aix en Provence guarantees the use of this doctrine at the national level.

- What is the scope of the SOP document(s)

The SOP document is related to all the procedures needed at the national level.

- Are SOPs understood and accepted by all parties, and implemented in practice?

Operating procedures and national guidelines are obviously used in practice, not only nationally but internationally in many partner countries.

- Are the SOPs regularly tested both by activation and by exercise?

SOPs are unified in France. They are written in the national reference guides. SOPs are taught in the county and national schools from the lowest levels to the highest level of the hierarchy. SOPs are used in exercises and in real intervention.

4.2 Operations planning

- Is there a national crisis/ emergency, disaster/ plan?

There are emergency plans at the National level and in each department (see section 3), the ORSEC plan¹⁰⁵⁹.

- Are there departmental crisis/ emergency, disaster/ plans? Please enumerate.

Regarding the Ministry of the Interior and Civil Protection, plans are available for each type of disaster (flood, earthquake, etc.). All the plans are described in specific Guides books¹⁰⁶⁰.

¹⁰⁵⁷ <http://www.interieur.gouv.fr/Le-ministere/Securite-civile/Documentation-technique/Les-sapeurs-pompiers/Doctrines-et-techniques-professionnelles/Guides-nationaux-de-reference-des-techniques-professionnelles>

¹⁰⁵⁸ <http://www.ensosp.fr/SP/>

¹⁰⁵⁹ <http://www.interieur.gouv.fr/Le-ministere/Securite-civile/Documentation-technique/Planification-et-exercices-de-Securite-civile>

- Are there local crisis/ emergency, disaster/ plans?

Plans are linked from the national to the municipal level (ORSEC plan).

4.3 Logistics support in crises

- Planned/ anticipated use of private logistics providers (e.g. DHL)

The French Civil Protection has 4 logistic bases located in the territory and that respond to many disasters. However, a prefect authority has the ability to command private companies for relief purposes.

- Planned/ anticipated use of military logistics support

The armed forces are involved in civil protection missions, either through an agreement signed for several years or after a requisition made by a Prefect.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

- Who is responsible for crisis communication? Who coordinates crisis communication within and among MSs? How is the inter-organisational coordination of information exchange about crisis communication to the general public organised and managed?

Each ministry provides its own communication. When a crisis requires an inter-departmental management (COGIC), the DGSCGC performs crisis communication with its own office. All the classic ways of communication are used: press, radio, TV. News tools such as MSGU¹⁰⁶¹ (Médias Sociaux en Situation d'Urgence: Social Medias in Emergency Situation) are also developed by all the national organisations implied in crisis management : Ministry of Interior, Prefet, Police, Civil safety...

- How long does it take for the general public to become informed about pending hazards?

Once the departments agree on the elements of language, the DGSCGC can make public information through radio channels and national television. Usually the general public will be informed within the first hour. However the delay can be shorter by the official (oral) communication of the public authorities and the Social Medias official accounts of the administration.

- Which technical infrastructure is used to achieve situational awareness at local/ national/ European/ international level?

¹⁰⁶⁰ <http://www.interieur.gouv.fr/Le-ministere/Securite-civile/Documentation-technique/Planification-et-exercices-de-Securite-civile>

¹⁰⁶¹ <http://www.risques.gouv.fr/risques-majeurs/utiliser-les-medias-sociaux-en-situation-durgence-msgu>

Television, radio, newspaper, national, zone and departmental command posts, sirens, municipal and national police, ERCC, etc...

5 Capabilities

5.1 Human resources

- Permanent emergency and disaster management personnel

At the local or municipal level, the mayor is in charge with police powers and a local command post (PCC). The mayor manages local means (municipal police, urban planning, etc.) and has the capacity to requisition. He has a Local Protection Plan (PCS) and when crisis management is activated he becomes the Director of Rescue Operations (DOS).

The mayor has a Local Civil Protection Reserve (RCSC) consisting of voluntary citizens whose mission is to support town services in the occurrence of a crisis exceeding usual capacities and to contribute to population support and assistance.

When the mayor is exceeded by the events, when response capacities are not enough or when the disaster goes beyond municipal limits (boundaries), the department Prefect takes over.

At the departmental level, the department Prefect, invested with police powers, is the Director of Rescue Operations (DOS). He commands the ORSEC mechanism (Organisation of the Civil Protection Response). He activates the Departmental Operational Centre (COD) and deploys the Operational Commandment Post (POC).

The Departmental Operational Centre (COD) is divided into 8 units :

- public order unit ;
- population protection unit ;
- military unit;
- telecommunications unit
- economic unit;
- communications unit (media);
- support;
- synthesis and communications unit.

As the DOS has the power to requisition, he can mobilise any public or private means. The Interministerial Service of Defence and Civil Protection (SIDPC) can provide support to study risk and develop a rescue plan, the SDIS is placed under its authority.

As previously, when the crisis exceeds departmental boundaries or response capacities and that crisis management reaches the zone level, it is the Zone Prefect, with the Zone Operational Centre (COZ), who takes over crisis management.

France is made up of 7 defence zones:

- North zone;
- Ile-de-France zone;
- West zone;
- Southwest zone;
- East zone;

- Southeast zone;
- South zone.

The zone Prefect has a General Secretarial Office for Police Administration (SGAP), a Zone Information and Communication Systems Service (SZSIC) and a Regional Information and Road Coordination Centre (CRICR).

Finally, at the national level, for large scale crisis, it is the Ministry of the Interior who supervises crisis management with the Interministerial Crisis Management Operational Centre (COGIC) and temporarily the Interministerial Crisis Centre (CIC).

A general secretary coordinates the actions of civil protection services (DGSCGC) and public safety (General Directorate of the National Police (DGPN)) which are reinforced by the General Directorate of National Gendarmerie (DGGN).

At the International level, the Ministry of Foreign Affairs works with the Health Ministry of the stricken country.

To summarise, the permanent staff of crisis management and emergency are people from municipal police, fire-fighting forces, Paris Fire Brigade (BSPP), Marine Fire Brigade of Marseille (BMPM), Military Civil Protection Units (UIISC), mine-clearing units, Logistics and Operational Support Unit (ESOL), Air Groups and civil protection associations.

- Capacity to mobilise personnel

The law of 22 July 1987, in Article 10¹⁰⁶², states that the competent authorities of the State in charge of managing rescue operations or launching the ORSEC mechanism (Prime Minister, state representative in the department where the headquarters of the defence area is located, state representative in the department), can "each" requisition necessary private rescue means.

In practice, these requisitions respond to an emergency situation by quickly completing the available rescue means and specific equipment (specialised repair vehicles, staff of companies involved in handling hazardous chemicals, etc.) during rescue operations. They cannot be implemented "*in ordinary circumstances*." Concerned businesses and individuals are compensated at a later stage.

- Involvement of volunteers, volunteer organisations, and specialised NGO personnel

National human resources come from public services (and / or private) but also from many civil protection associations. These associations are made up of volunteers and employees. Authorities do not always have sufficient resources (human and material) to overcome the emergency. It is therefore essential in order to cope with a crisis, to have the support of civil protection associations. These associations intervene to complement public service missions when a request is made by the competent authorities. Article 35 of the law of 13 August 2004¹⁰⁶³ created a 5 year agreement for associations that want to be integrated into the systems put in place by the government. These associations are authorised to respond to any or all of the following types of missions:

¹⁰⁶² <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000421070>

¹⁰⁶³ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000804612>

- rescue operations;
- support actions for disaster victims;
- supervising volunteers during actions to support affected population;
- provisional rescue devices.

Annual agreements are signed between public authorities and the SDIS to define the circumstances, intervention methods and their integration into the rescue plans.

Below are three major associations groups:

- The French Red Cross, the French Society of Disaster Medicine (SFMCI), the French Society of Emergency Medicine (SFMU), the National Federation of Radio Transmitters at the service of Civil Security. (FNRASEC), ...
- Representations of health professionals, the SAMU of France, the association of emergency doctors of France (AMUF), the National Association of Medical Students of France (ANEMF) ...
- NGO: Doctors Without Borders, Doctors of the World, Bioforce,

Another association needs to be listed because its support from a health point is very important: it is the Establishment of Preparedness and Response to Health Emergencies (EPRUS). EPRUS has the capacity to respond to health threats, in France and abroad. Indeed, this association has facilities to organize and deploy health forces during severe health crises. This health reserve includes all types of health professionals. After being trained they participate in emergency missions in case of serious health crises, and their pharmaceutical establishment manages the national strategic health stock needed to protect the population in case of emergency.

The National Federation of Civil Protection should also be mentioned. It provides operational reinforcement for public rescue services (SAMU, fire brigade) during rescue plans, participates in supporting affected population in case of disasters and supervises volunteers.

- Involvement of private businesses

As we have said before, competent authorities have the power to requisition, as needed, private resources for rescue purposes and very often this is done in the frame of a partnership. Various operators such as SNCF, telephone operators, motorway companies, water and electricity distributors can be mobilised. In addition, upon request of the person requisitioned, the administrative court can grant an advance payment representing all or a part of the compensation.

- National educational programme(s)

Since the law of civil protection modernization of 13 August 2004, training has become a permanent obligation. In order to test rescue plans, verify procedures (and tools developed) and to evaluate the means and the teams, exercises are performed each year involving all stakeholders at all levels (representatives of the political and administrative authorities, media, elected officials, public and private operators).

The new program for modernization of civil security has for aim to involve population that lives nearby a major risk. Today populations are not implied in those exercises even if they receive documentation to inform them on action to be taken in case of crisis.

Reference: « Exercices de sécurité civile: mémento en 10 points¹⁰⁶⁴. »

These exercises enable to identify shortcomings in the crisis management chain and to propose appropriate modifications. Communal exercises work on the evacuation and / or containment of a neighbourhood. For departmental exercises, the themes are given by the DGSCGC. They can focus on a pandemic crisis, a CBRNE disaster, or a road crisis. Zone exercises are initiated by zone prefects in order to train departments at working at the zone level on pandemics, winter weather.... Interdepartmental government exercises sometimes involve the zone or the department.

5.2 Material (non-financial) resources

- What specific non-financial resources (dedicated equipment etc.) have been allocated to crisis management (central, regional, local preparedness and response)?

It is very difficult to know the specific resources that have been allocated to crisis management. However, the French Red Cross annually publishes a report on the actions conducted.

For 2011:

- 55 million meals distributed;
- 539 lockers and 278 clothing stores put in place;
- 98 institutions dedicated to early childhood and child protection;
- 118 accommodation facilities affected.

For 2012:

- 831 food aid structures installed;
- 318 clothing stores put in place;
- 2263 accommodation places affected;
- 113 reception facilities dedicated to infancy and early childhood.

For 2013:

- 1002 food aid units installed;
- 412 clothing stores put in place;
- 2630 accommodation places affected;
- 2970 places dedicated to early childhood and child protection.

- Permanent reserve stocks (fuel, food, medicines, tents, blankets, etc.)

The national reserve of the General Directorate of Civil Protection and Crisis Management (DGSCGC) is constituted of materials for the reinforcement of national rescue and protection of persons and

¹⁰⁶⁴ www.interieur.gouv.fr/content/download/.../memento%20exo%20SC.pdf

property. All this equipment complements the material of local and regional authorities for large scale disasters.

There are three ESOLs (Establishments of Operational and Logistical Support of the DGSCGC): one in the North, one in the West, one in the South, plus an annex in the East. The stock of the national reserve is made up of seven families according to their action areas.

The first family contains equipment to produce and supply drinking water. The types of risks that match these materials are:

- Flood;
- Biological Pollution;
- Earthquake;
- Displacement of populations;
- Cyclone.

In this family, we find water treatment units (CELTE), automatic bagging machines for 2L bags, water distribution headers with 5 taps, 1000m flexible food grade pipes to supply water, water pressure regulators, a mobile overpressure unit and different types of tanks.

The second family contains cleanup and search and rescue equipment. The types of risks that match these materials are:

- Flood;
- Biological Pollution;
- Oil and Chemical Pollution;
- Cyclone.

There are autonomous hot and cold water pressure cleaners, sawing materials, storage tanks with a total capacity of 0.5 to 20 m³, various containers (garbage cans, buckets, wheelbarrows, ...), hand tools (shovels, forks ...), plastic covers, rolls of polyane, oil spill gloves and coveralls.

The third family contains energy materials and outdoor lighting. The types of risks that match these materials are:

- Flood;
- Earthquake;
- Displacement of populations;
- Cyclone.

In this family we find power generators ranging from 2.5 to 110 KVA having a total capacity of 2 000 KVA, outdoor lighting from 300 to 1000 Watts with a total capacity of 70 000 Watts and lighting balloons between 1 200 and 4000 Watts.

The fourth family contains equipment for accommodation and catering. The types of risks that match these materials are:

- Flood;
- Earthquake;

- Displacement of populations;
- Cyclone.

The equipment consists in modular tents with a total capacity of 2000 people, camp beds, sleeping bags, blankets, and a collective catering unit.

The fifth family consists in pumping and flood fighting equipment. The types of risks that match these materials are:

- Flood;
- Cyclone;
- Marine submersion.

Here we find mobile pumping units with 5400 m³/h capacity, mobile pumping with 850 m³/h capacity, heat engine pumps from 15 to 150 m³/h, electric submersible exhaustion pumps from 15 to 360 m³/h, a total pumping capacity of over 52 000 m³/h, more than 5 km of flood dam, over 900 m² of modular elements to build platforms and floating walkways.

The sixth class is composed of CBRN equipment and protective equipment. The types of risks that match these materials are:

- Chemical and Biological Pollution;
- Nuclear Pollution;
- Oil spill pollution.

There are CBRN decontamination light clothing kits, respiratory protection masks, personal protective kits, disposable suits and autonomous thermal sprayers.

And finally the seventh family contains specific forest fire intervention equipment (2 wildfire batches in the North and in the South).

- Planned /anticipated/ involvement of specific military assets (e.g. reconnaissance assets, search and rescue helicopters, fire-fighting planes/helicopters, CBRN, etc.)

The support for territorial civil protection services is provided by the operational services of the General Directorate of Civil Protection and Crisis Management of the Interior Department.

To cope with disasters, the sub-directorate of crisis planning and management must handle the three phases of the crisis: preparedness, response and feedback.

This sub-directorate analyzes the various risks such as natural hazards, technological risks, nuclear risks ...). It also ensures fire prevention and regulations.

The sub-directorate of risk management also defines the framework for rescue planning. It invests in information and public awareness concerning risks and threats, including warning systems. Active in the national policy for civil protection exercises, it organises the feedback and contributes to ensure the training for risk and operations management.

Operational services operate throughout the French territory and contribute to International rescue actions. They include different structures including:

- Air assets pool (GMA);
- Mine-clearing centre;
- Military units.

Civil protection military units reinforce territorial fire-fighters when circumstances require support or special preparation facing risks. These units (UIISC: civil protection instruction and intervention units) are specialised in the areas of forest fires, technological risks and buried victims search.

Civil protection bomb-disposal experts mainly carry out safeguarding missions.

The civil protection air assets pool is divided into two groups:

- A helicopter group: :
 - A central department which includes a commandment safeguarding missions base, a centre for crew training and an aircraft maintenance centre;
 - 22 helicopter bases plus one in Guadeloupe.
- An airbase.

Helicopter missions are, in increasing order of priority, the following:

- conditioning of personnel and equipment;
- police and technical assistance;
- forest fire fighting and non-emergency rescue;
- urgent rescue.

Civil protection has a fleet of 25 water bombers (Canadair CL-415, S-Tracker 2FT and Bombardier Dash 8) and 3 liaison and investigation aircrafts.

The chemical, biological, radiological, nuclear and explosives (CBRN-E) service is placed under the authority of the General Director of Civil protection and Crisis Management. Its mission is to develop intervention procedures that are intended to strengthen response capacity and resilience in managing a major CBRNE crisis on the French territory.

- Is provision made for governments to mobilise or commandeer private assets during crises?

As for human resources, when the material resources of authorities are insufficient to face an emergency, both because of the amount of equipments needed and because of the specificity of certain needs, competent authorities have the power to requisition needed resources.

5.3 Training

- National, local and departmental exercises

DGSCGC recommends organizing regular exercises at district, zone and national levels. To this end, it publishes various methodology guides for exercise management or field exercises. It also publishes guides for feedback.

- Centralised specialist training

Specialty trainings are made only in a small number of centres approved by the DGSCGC. The wild fire training levels 3, 4 and 5 can be done only at the ECASC (Civil Protection Application School). It is the same for mountain rescue team training. The fire training for ships is only performed by BMPM, etc...

- Training of volunteers and NGO personnel

Volunteer fire-fighters receive the same training as professional fire-fighters. Consequently, during field operations, it is not possible to differentiate between the two types of fire-fighters.

NGO training is the responsibility of their own structure in the framework of the DGSCGC agreement.

- Cross-border and multinational training activities

Cross-border training and exercises are under the responsibility of departmental prefects and departmental directors of fire and emergency services of border departments.

Some exercises are organised to the initiative of departments on the border. Those exercises are not mandatory and do not frequently occur but are more and more developed.

The last exercises operated on South of France are:

- NOVI (nombreuses victimes, several victims) with Italy
- RICHTER with Spain and Italy.

Reference: « Rapport sur les règles et principes applicables aux actions internationales en cas de catastrophe (IDRL) en France » croix Rouge Française. 2010¹⁰⁶⁵

- Is there a certification system? What standards are used to define specialists' training requirements?

France has engaged into an INSARAG¹⁰⁶⁶ (International Search and Rescue Advisory Group) certification process for its HUSAR (Heavy Urban Search and Rescue) teams and into an EU certification process for other specialised modules. It can provide the ERCC all specialised modules provided by the decision of the European Commission of 10 June 2010.

¹⁰⁶⁵ www.ifrc.org/PageFiles/93645/country-report-france-082010-fr.pdf

¹⁰⁶⁶ <http://www.insarag.org>

French education is unified and is described in national reference guides. Training must be approved by the DGSCGC who verifies that everything is in reference guides and in French doctrine in the concerned specialty.

- Are there specialised training programmes for high-level decision makers?

The DGSCGC deals more specifically with training for crisis management prefects and office chiefs. There is a general training for natural and technological risks.

- Training centres

France has a national school to train firefighter officers (ENSOSP) and a specialty school (ECASC). In addition, all departments have departmental schools to achieve basic training for their firefighters.

5.4 Procurement

5.4.1 Procurement regulation

- What needs to be procured? E.g. goods or services, including trainings?

Public procurement concerns all goods and services bought by the French government or local authorities. All expense above 1€ must be subject to a contract. Only procedures change depending on the amount of the financial transaction. These contracts must meet public procurement directives. (Code des marchés publics (*Décret n° 2006-975 du 1er août 2006 modifié*)).

Official laws for French public procurement: Public procurement code (CMP)

- Public procurement code¹⁰⁶⁷
- Circular letter for the application of the public procurement code¹⁰⁶⁸
- Corresponding table for public procurement codes of 2004 and 2006¹⁰⁶⁹.
- Decrees for modification of public procurement code¹⁰⁷⁰
- Circular letter for good practice of public procurement code¹⁰⁷¹.

- Which EU directive on procurement is applicable on procurement of CM tools and related?

¹⁰⁶⁷ http://www.economie.gouv.fr/files/directions_services/daj/marches_publics/textes/cmp/code2004/decret_2004-15_consolide.pdf

¹⁰⁶⁸ http://www.economie.gouv.fr/files/directions_services/daj/marches_publics/textes/cmp/code2004/mco-gras.pdf

¹⁰⁶⁹ http://www.economie.gouv.fr/files/directions_services/daj/marches_publics/textes/cmp/code2004/tab_correspondance_cmp2006-cmp2004.pdf

¹⁰⁷⁰ <http://www.economie.gouv.fr/daj/Decrets-modificatifs-du-code>

¹⁰⁷¹ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000025364925>

The European directives applicable for the procurement of crisis management tools and related are the ones relevant for all public procurement in Europe: directives 2004/18/CE¹⁰⁷² and 2004/17/CE¹⁰⁷³ currently applicable and two new directives 2014/24/EU¹⁰⁷⁴ and 2014/25/EU¹⁰⁷⁵.

The directives 2004/17/CE and 2014/25/EU concern exclusively procurement by entities operating in the utilities sectors: water, energy, transports and postal services. It is called “sector directive”. Those directives are not applicable for crisis management tools and services.

The Directives 2004/18/CE and 2014/24/EU concern public procurement for all the others sectors, including crisis management tools and services. This directive (called “classical directive”) applies to public contracts concluded by a contracting authority in sectors other than the water, energy, transport and postal services sectors for supplies, services and works.

Extract from the “Summary of EU legislation¹⁰⁷⁶”: Public work contracts, public supply contracts and public service contracts:

“The “traditional directive” applies to public work contracts, public supply contracts and public service contracts which have a value excluding VAT estimated to be no less than the pre-established thresholds.

The value of the thresholds is the following (values updated every two years by the Commission):

- EUR 130 000 for public supply and service contracts awarded by central government authorities (ministries, national public establishments);
- EUR 200 000 for public supply and service contracts: awarded by contracting authorities which are not central government authorities; covering certain products in the field of defence awarded by the central government authorities; concerning certain services in the fields of research and development (RTD), telecommunications, hotels and catering, transport by rail and waterway, provision of personnel, vocational training, investigation and security, certain legal, social and sanitary, recreational, cultural and sporting services;
- EUR 5 000 000 in the case of works contracts”.

The new European directives (2014/24/EU) should be transposed into French law in order to be applicable no later than February 2016. They will be integrated into the French public market code (CDM).

A decree (n°2014-1097) dated on September 26th 2014 (JORF n°0225) transposes in an accelerated way the new European Directives 2014/24/EU in the French public market code (CDM).

- Decree n°2014-1097, September 26th 2014: public procurement simplification, transposed from European Directive 2014/24/EU¹⁰⁷⁷

¹⁰⁷² <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000702882&categorieLien=id>

¹⁰⁷³ <http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex:32004L0017>

¹⁰⁷⁴ http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=uriserv:OJ.L_.2014.094.01.0065.01.FRA

¹⁰⁷⁵ http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=uriserv:OJ.L_.2014.094.01.0243.01.FRA

¹⁰⁷⁶ http://europa.eu/legislation_summaries/internal_market/businesses/public_procurement/l22009_en.htm

¹⁰⁷⁷ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000029504714&categorieLien=id>

- DAJ (Direction of the Juridical Affairs) : decree for simplification measures on public procurement¹⁰⁷⁸

From this last reference, we precise that this decree concerns different points:

- The upper limit of the annual turnover due by the supplier: this request cannot be more than twice the value of the market. The aim of this decree is to open the procurement procedure to SMEs.
- The simplification of the application files.
- Creation of a new kind of procurement to facilitate public market in research and development.

- Are all articles of the directive applicable or are some articles not implemented?

From article 288 of the Treaty on the functioning of European Union¹⁰⁷⁹ (2008/C 115/01):

“A regulation shall have general application. It shall be binding in its entirety and directly applicable in all Member States.

A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods.”

Directives are framework laws, mandatory because they link Member States to the result to be reached. Consequently, all the articles of the Directives must be transposed in French law, within the time limit allowed by the European Union.

Thus, Directive 2004/18/CE regarding Public procurement has been transposed in French law according to the transposition texts:

- Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004¹⁰⁸⁰ on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts
- Texts of transposition of the Directive 2004/18/CE¹⁰⁸¹
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC¹⁰⁸²

¹⁰⁷⁸ http://www.economie.gouv.fr/files/files/directions_services/daj/marches_publics/textes/autres-textes/fiche-decret-mesures-simplifications-mp.pdf

¹⁰⁷⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:C2008/115/01&from=FR>

¹⁰⁸⁰ http://europa.eu/legislation_summaries/internal_market/businesses/public_procurement/l22009_fr.htm

¹⁰⁸¹ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000702882&dateTexte=&fastReqId=342410301&fastPos=1&oldAction=rechExpTransposition>

¹⁰⁸² <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014L0024&from=FR>

According to “New rules on public contracts and concessions¹⁰⁸³”:

“National freedom of organisation is not affected: it is for the Member States alone to organise public services as they see fit. A public authority remains free to perform the public interest tasks for which it is responsible, either using its own staff or by delegating these tasks to external firms – it is only in the latter case that the rules on public contracts and concessions apply.”

- Consolidated versions of the treaty on European Union and the treaty on the functioning of the European Union (2008/C 115/01)¹⁰⁸⁴
- SMEs' access to public procurement markets and aggregation of demand in the EU¹⁰⁸⁵
- Are additional national regulations applicable and/or are there additional requirements?

Generally, French laws are more restrictive than European directives. The French public procurement code does not have specific requirements regarding the procurement of tools and services for crisis management. Common law applies for these procurements.

Thus, the French public procurement code (CMP) plans:

- For local public authorities and communities, the procedures planned by the European Directives enforce on public contracts with a value higher or equal to 211000€ HT. Under this value, National law applies (French public procurement code, CDM).
- Procurements for the State and its public entities are governed by the public procurement code. This law sets thresholds from which different purchasing procedures should be followed.

Three thresholds exist for public procurement concerning the purchase of supplies and services for the French State and its local authorities, depending on the amount of the transaction (see: marchés publics.com, serve-public.fr). These different procedures are described in question 5.4.2.

- How often is there a need to jointly buy CM tools or services? And how often does cross-border procurement occur? Are there any considerations for future joint procurement? If yes, in what area and what are potential partner nations?

According to the DGSCGC with the Office of the Operations and Crisis Management, the tools for crisis management are homemade. Most are developed by their own offices, with the support of departments from the Ministry of the Interior such as the Directorate of Information and Communications Systems (DSIC). Public procurements can occur to carry out some services.

There is no joint buying or cross-border procurement for crisis management tools or services in France.

¹⁰⁸³ http://ec.europa.eu/internal_market/publications/docs/public-procurement-and-concessions_en.pdf

¹⁰⁸⁴ <http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:C2008/115/01>

¹⁰⁸⁵ http://ec.europa.eu/internal_market/publicprocurement/docs/modernising_rules/smes-access-and-aggregation-of-demand_en.pdf

- Is there a need for additional legislation with regard to cross-border procurement?

There is legislation for cross-border procurements for local authorities and their groups, excluding SDIS or interdepartmental groupings. It is the subject of the interministerial circular of 20 April 2001 for decentralised cooperation¹⁰⁸⁶.

This circular applies only to local entities and their groupings, this circular specifies that SDIS are not group of local entities.

From the “Cross-border competence and cooperation of the fire and rescue services in the European framework¹⁰⁸⁷”: “In this cooperation “French local and foreign local entities”, on one side the SDIS can only be an operator, and on the other side the sector of action has a limited extent, since it can’t concern directly the security and the protection of population, which are under the jurisdiction of the public authorities”.

However there are numerous bilateral agreements within the European Union. The countries of the South of Europe cooperate especially for forest fire fighting. These cooperations do not concern any procurement procedures.

Currently, there are no needs for additional legislation for cross-border procurement since none is envisaged.

- How important is interoperability and do issues arise around the interoperability?

Interoperability is a major concern for crisis management because it allows the adaptability of decision support tools for all natural or manmade disasters, and for all existing investigation tools. Likewise, crisis management tools must adapt to the different crisis management actors, on all operational levels: from the local entity to the National and European entities.

Interoperability is a real problem for crisis management. There are currently a lot of initiatives of Europe to develop interoperability. The actual directives are to develop “open systems” so any software can enter in any program.

Major crisis management in France is governed by the ministerial circular letter of the January 2d, 2012¹⁰⁸⁸. This circular sets the frame of the interoperability of the tools used during all crisis management, both at departmental, zonal and national levels. Please refer to section 2.

¹⁰⁸⁶ <http://www.senat.fr/ct/ct04-02/ct04-028.html>

¹⁰⁸⁷ http://crd.ensosp.fr/doc_num.php?explnum_id=7884

¹⁰⁸⁸ http://circulaires.legifrance.gouv.fr/pdf/2012/01/cir_34453.pdf

5.4.2 Procurement procedures

- Which organisations are involved in the procurement of CM tools? And how do they organise their procurement process?

The organisations implied in the procurement of crisis management tools are the French State through the Ministry of Interior and the DGSCGC as well as the SDIS of each French department.

Procurement procedures are governed according to the French public procurement code¹⁰⁸⁹ (CMP) and depend on the value of the contract. The next table sums up the thresholds and the associated procedures for the procurement of supplies and services (sector that concerns crisis management, another sector is for public works).

Public procurements of supplies and services

Thresholds		15000 € HT	90000 € HT	200000€ HT
Advertising	Supplies and services (art.29)	None	Adapted advertising	Compulsory advertising : compulsory national pattern: BOAMP or JAL + publication on the buyer profile
			Additional advertising is optional	
	Services (art.30)	Adapted advertising		
Competition		None	None but under buyer responsibility	Introducing competition

¹⁰⁸⁹ http://www.economie.gouv.fr/files/directions_services/daj/marches_publics/textes/cmp/code2004/decret_2004-15_consolide.pdf

Procedure	Supplies and services (art.29)	Adapted procedure	Relevant procedures: opened or restricted requests for proposal (art.33) ; negotiated procedures (art.35) ; competitive dialogues (art. 36) ; competition (art.38) ; dynamic acquisition system (art.78) ; (exclusively for common supplies)
	Supplies (art.30)	Adapted procedure	

Table 6: Public procurement Procedures for supplies and services (EPLFM document)

BOAMP: Official Bulletin for Public Procurement Announcing

JAL: Legal Announcing Journal

OJEU: Official Journal of European Union

Adapted procedure: freely decided by the buyer depending on the nature of the procurement, on the needs to be satisfied, on the number and localisation of suppliers and procurement circumstances.

- How is the procurement process in the non-EU countries organized? Are coordinating activities of any kind in place or are they planned?

Procurement procedures in non European countries are specific in each country and are unknown by the French State. Meanwhile we can find on the web some articles concerning procurement processes in some large countries. The next paragraph summarises the main links to information on the procurement procedures of some countries concerned.

- Government procurement in the United States¹⁰⁹⁰
- Government procurement in Russia¹⁰⁹¹
- Switzerland's Public Procurement system¹⁰⁹²
- Turkish public procurement authority (PPA)¹⁰⁹³

¹⁰⁹⁰ http://en.wikipedia.org/wiki/Government_procurement_in_the_United_States

¹⁰⁹¹ http://en.wikipedia.org/wiki/Government_procurement_in_Russia

¹⁰⁹² <http://www.tendersinfo.com/blogs/switzerlands-public-procurement-system/>

¹⁰⁹³ http://www.sigmaweb.org/events/Multi_Country_KZ7104_Presentation_Turkey_Danilovgrad_21June2013.pdf

5.5 Niche capabilities

- Which niche capabilities of the country /IO are potentially of interest to the EU CM and disaster response?

The French State owns civil security means in various domains of natural or manmade disasters that have already proven their value in different European countries and in the world.

At the European level, there is a Common Emergency Communication and Information System (CECIS, ECHO reference: ECHO/B.1/SER/2011/01)¹⁰⁹⁴ which allows answering the demands from all countries (even outside of the European Union) when they are in a crisis situation.

The concerned country makes a request for help which is relayed to all the European countries offering their help, which is accepted or not by the demanding country.

There is also an Emergency Response Centre (ERCC)¹⁰⁹⁵ which works on the same principle with the financial participation of the European Commission for staff travelling expenses during operations (case of the intervention in Sweden in august 2014 for forest fires). See following references.

- Decision N° 1313/2013/EU of the European parliament and of the council of 17 December 2013 on a Union Civil Protection Mechanism¹⁰⁹⁶
- The European Emergency Response Centre Opens. European Commission MEMO/13/427 15/05/2013¹⁰⁹⁷

The Commission Decision of 29 July 2010 (amending Decision 2004/277/EC) as regards rules for the implementation of Council Decision (2007/779/EC) defining a Community civil protection mechanism, establishes the form that must take community assistance. This decision defines the general requirements that apply to European protection civil modules.

- **Commission Decision of 29 July 2010 amending Decision 2004/277/EC Euratom, as regards rules for the implementation of Council Decision 2007/779/EC Euratom, establishing a Community civil protection mechanism**¹⁰⁹⁸
- Council conclusions on Further Developing Risk Assessment for Disaster Management within the European Union¹⁰⁹⁹.

The niche capabilities for the French State are listed below:

¹⁰⁹⁴ <http://ec.europa.eu/echo/fr/funding-evaluations/public-procurement/call-for-tender/common-emergency-communication-and-information-system>

¹⁰⁹⁵ http://ec.europa.eu/echo/what/civil-protection/emergency-response-coordination-centre-ercc_en

¹⁰⁹⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1313&from=EN>

¹⁰⁹⁷ [http://europa.eu/rapid/press-release MEMO-13-427_en.htm](http://europa.eu/rapid/press-release_MEMO-13-427_en.htm)

¹⁰⁹⁸ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2010.236.01.0005.01.ENG

¹⁰⁹⁹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/121462.pdf

1. **Forest fires:**

- Aerial forest firefighting module using airplanes: the fleet of air tankers includes 12 Canadairs, 9 Trackers, 2 Dash 8 and 3 Beech crafts.
 - French detachments for far-off countries are most often composed of 2 Canadairs and one beech craft. They also include two plane pilot crews (of two pilots) and four maintenance staff. A senior forest fire fighter manager is in charge of the coordination of the intervention. A total staff of 17 people.
 - For bordering countries (Spain, Italy), the detachment is composed by only two Canadairs with their two pilot crews, they use the same work method as in France.
- Aerial forest firefighting module using helicopters :
 - Three helitankers with a capacity of 1000 liters.
- Ground forest firefighting : two kinds of modules
 - Ground forest firefighting using vehicles: 1 VLTT (off-road liaison vehicle) and 4 wildland fire tankers, a total staff of 30 people.
 - Ground forest firefighting without vehicles: airborne specialized intervention detachment (DIS). A staff of 30 people equipped with forest cutting tools, motor-pumps...

2. **Earthquake and explosion: urban search and rescue:** INSARAG classification¹¹⁰⁰

- Two HUSAR teams (heavy teams) have been classified in March 2014: UIISC1 and UIISC7 (military teams)
- One French NGO, Pompiers Urgence Internationale (PUI) is classified MUSAR (medium team).
- Two new HUSAR teams (Civil protections teams) should be classified in 2016 and 2017: south Zone team in 2016 and Ile de France team in 2017.
- (INSARAG, Preparedness-response) Each of these INSARAG classified teams owns the material needed for its actions. *“A heavy urban search and rescue team is required to have:*
 - *the equipment and manpower to work at a heavy technical capability at two separate work-sites simultaneously;*
 - *both a search dog and technical search capability;*
 - *the technical capability to cut structural steel typically used for construction and reinforcement in multi-storey structures;*
 - *the capability to conduct heavy rigging and lifting operations;*
 - *staff and logistic sufficient to allow for 24 hour operations at 2 independent sites for up to 10 days.”*

French HUSAR teams have 62 people.

3. **Chemical cleanup and clearing:**

- High pressure cleaners: 5 with hot water; 24 with cold water.
- Chain saw modules: 245.

4. **High capacity pumping : flooding, cyclone, marine flooding:**

¹¹⁰⁰ <http://www.insarag.org/en/methodology/guidelines.html>

- Mobil pumping units: 5 UMP5400 at 1.5m³/s.
- Pumping units: 8 UP850 at 850m³/h.
- Thermal motor-pumps: 152 at 50m³/h and 73 at 150 m³/h.
- Flood containment, pumping and drying unit CELPA, Modular floating rig.
- Flood rescue using boats: navigation unit CELNAV.

5. Field hospital:

European Commissions requirements (**Commission Decision of 29 July 2010**) for field hospital:

- Provide initial and/or follow-up trauma and medical care.
- 10 beds for heavy trauma patients, possibility to expand the capacity.
- Medical team for: triage, intensive care, surgery, serious, but not life-threatening injuries, evacuation, specialised support personnel.
- Appropriate tents for the medical activities, tents for personnel.
- Command post, logistic and medical supply deposit.

In France, we have a field hospital that can be operational in 24 hours. This unit called ESCRIM, includes a department for surgical support (Civil Protection Units) and a department for medicine and hospitalisation (Civil Security Military Units). This hospital with 33 tents and a surface of 1500 m², includes 100 beds, 2 operating blocks, medical imaging units, sterilization modules, laboratory of biological analysis, health centre, maternity.

Staff is composed of 75 people issued from civil safety and civil protection units who are periodically checked for capacity, availability and trained. Likewise materials are periodically checked.

This field hospital is available 24/7. It is totally autonomous and does not need any local help.

6. Water purification: flooding, biological hazard, earthquake, population displacement, cyclone.

- France owns 4 water treatment units: CELTE 5 m³/h of capacity each. No treatment of salted water.
- Semi automatic bag filler
- Mobile boosting station for drinkable water.

7. Chemical, biological, radiological and nuclear detection and sampling (CBRN)

- Individual protection kits: kit CLD NRBC
- Respiratory protection masks

8. Medical aerial evacuation of disaster victims

- Transport disaster victims to health facilities for medical treatment.
- Capacity to transport 50 patients per 24 hour, ability to fly day and night.
- Helicopters/planes with stretchers

Resources

Legislative acts

- French town planning code: art. L.121-2 du Code de l'Urbanisme.
- Law n°82-600 of 13 July 1982: promulgates the texts for the compensation of victims of natural disasters.
- Law No. 87-565 of 22 July 1987 organising civil protection and major risks prevention, creating the right to information.
- Law No. 95-101 of 2 February 1995 on strengthening environment protection, called " Loi Barnier. "
- Law No. 2003-699 of 30 July 2003 on technological and natural risks prevention and on damage repair.
- Law No. 2004-811 of 13 August 2004 on the modernization of civil protection.
- Law n°2003-699 of 30 July 2003 and its application decree n°2005-1466 of 28 November 2005, creating the CAT-TECH device.
- The circular n° NOR: INT/E/06/00120/C of 29 December 2006 defines the ORSEC mechanism.
- Decree n°2005-1157 of 13 September 2005 related to the ORSEC mechanism (department, zone and sea).
- Circular N°NOR:INT/E/06/00120/C of 29 December 2006 defining the departmental ORSEC mechanism.
- Circular n°5567-SG of 2 January 2012: governmental organisation in case of major crisis management.
- Circulars 007/SGDN/PSE/PPS of 8 October 2009 and 747/SGDN/PSE/PPS of 30 October 2009: intervention doctrines when facing a CBRN terrorist threat or attack, defines interveners and State doctrine.
- Circular 700/SGDN/PSE/PSS of 7 November 2008: urban chemical attack against civilian population and Circular 800/SGDN/PSE/PSS of 18 February 2011 on radioactive attacks.
- Circular 2002-119 of 29/05/2002: elaboration of a specific security plan against major risks for schools.
- Circular of 3 May 2002: set up of an emergency preparedness plan (white plan) for every public health facility in order to cope with numerous victims.

Official documents (white papers, strategies, etc.)

- Guide pour réaliser un plan de continuité, Secrétariat Général de la Défense et de la Sécurité Nationale, 2013. http://www.sgdsn.gouv.fr/site_article128.html.
- Etude en temps réel de la gestion de la crise en Haïti après le séisme du 12 janvier 2010, groupe URD, étude financée par la Délégation aux Affaires Stratégiques du Ministère de la Défense. www.urd.org/IMG/pdf/rapport_DASHaiti.pdf
- Plan de prévention des risques naturels (Ministère de l'écologie et du développement durable). www.risquesmajeurs.fr/les-plans-de-prevention-des-risques-naturels-ppr
- Le maire face aux risques naturels et technologiques (Ministère de l'écologie et du développement durable, Ministère de l'intérieur).
<http://www.mementodumaire.net/responsabilites-du-maire-2/r1-prevention-des-risques-majeurs-roles-du-maire-etou-epci-et-de-letat/>
- Exercices de Sécurité Civile (Ministère de l'intérieur), 2013.
www.interieur.gouv.fr/content/download/.../memento%20exo%20SC.pdf
- Synthèse RETEX 2013 (Ministère de l'intérieur), 2013.
www.interieur.gouv.fr/content/download/.../Synthese_RETEX_2013.pdf
- Guide pour réaliser un PCA (Secrétariat général de la défense et de la sécurité nationale), 2014.
www.risques.gouv.fr/sites/default/.../guide_pca_sgdsn_110613_normal.pdf
- Catastrophes environnementales : préparer l'évaluation de leurs effets et le retour d'expérience, Ministère de l'Ecologie, 2008. www.developpement-durable.gouv.fr/IMG/pdf/Catastrophes--_Web.pdf
- The CBRN governmental plan 10135/SGDN/PSE/PPS CD of 16 September 2010: its aim is to provide a decision aid to the Prime Minister and to his ministers during CBRN threats and events. www.sgdsn.gouv.fr/IMG/pdf/2011_02_18_800-2.pdf

Online resources (e.g. websites of key CM organizations)

- Ministry of the Interior: www.interieur.gouv.fr/
- Ministry of Sustainable development: www.developpement-durable.gouv.fr
- Research education : <http://www.enseignementsup-recherche.gouv.fr/>
- Ministry of education: <http://www.education.gouv.fr/>
- Ministry of Economy : <http://www.economie.gouv.fr/>
- Ministry of Agriculture : <http://agriculture.gouv.fr/>
- First Aid : www.secourisme.net
- Senate report : <http://www.senat.fr/rap/I03-339/I03-33923.html>
- EPRUS website : <http://www.eprus.fr/qui-sommes-nous.html>

- Red Cross 2011 annual report: <http://www.croix-rouge.fr/Mediatheque/Publications/Rapport-annuel-2011>
- Red Cross 2012 annual report: <http://www.croix-rouge.fr/Mediatheque/Publications/Rapport-annuel-2012>
- Red Cross 2013 annual report: <http://www.croix-rouge.fr/Mediatheque/Publications/Rapport-annuel-2013>
- Entente for the Mediterranean Forest website : <http://www.entente-valabre.com/>
- ECASC (fire-fighter specialty school) website : <http://www.valabre.com/joo2012/>
- ENSOSP website (fire-fighter officer school) : <http://www.ensosp.fr/SP/>
- VISOV website : <http://visov.org/cms/>
- Public work, supplies and service contracts :
http://europa.eu/legislation_summaries/internal_market/businesses/public_procurement/l22009_en.htm
- USA public procurement :
http://en.wikipedia.org/wiki/Government_procurement_in_the_United_States
- Russian public procurement :
http://en.wikipedia.org/wiki/Government_procurement_in_Russia
- Swiss Public Procurement system : <http://www.tendersinfo.com/blogs/switzerlands-public-procurement-system/>
- Turkish public procurement : <http://www.tendersinfo.com/blogs/switzerlands-public-procurement-system/>
- Common Emergency Communication and Information System ECHO reference :
<http://ec.europa.eu/echo/fr/funding-evaluations/public-procurement/call-for-tender/common-emergency-communication-and-information-system>



Driving Innovation in Crisis Management for **E**uropean **R**esilience

GERMANY

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: FhG-INT (Maike Vollmer, Isabelle Linde-Frech)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by EPLFM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Germany is a federal republic consisting of 16 constituent states (*Bundesländer* or *Länder*). States have their own government and parliament and possess a high degree of autonomy. Subsequent governmental levels are the administrative counties (*Landkreise*) or county boroughs (*kreisfreie Städte*) – combined in administrative districts –, and the municipalities (*Kommunen*). The principle of subsidiarity has to be applied wherever possible. As given in the German Basic Law (*Grundgesetz*, comparable to a constitution) and in the Treaty of Lisbon, the states play an active role in the decision making process regarding the German EU policy.

Main risks in the DRIVER context are seen in weather related hazards such as floods, heat waves, and storms, while the risk of major losses caused by earthquakes or landslides is rather low.

Following the terrorist attacks on 11 September 2001, and the severe flood in Germany in 2002, a “New Strategy on Civil Protection” has been enacted in 2002, updated in 2010, providing the new political-strategical framework programme in civil protection. Main goal is an optimized collaboration of the federal level and the states in preparation to and coping with disasters relevant on national level.

The first authority in the event of a peacetime disaster is the cognisant rural district, county or municipality. In case a disaster exceeds capacities of the local government or affects several districts, the next highest hierarchical authority ensures coordination.

If needed, a state can call for the assistance of police forces of other states or of personnel and facilities of other administrative authorities, of the Federal Police or the Armed Forces. Also, the Federal Agency for Technical Relief (THW) may be called.

At the national level first of all the Federal Ministry of the Interior (BMI), assisted by the Federal Office of Civil Protection and Disaster Assistance (BBK) and the German Federal Agency for Technical Relief (THW) are the core institutions responsible for crisis management.

The Federal Foreign Office (AA) plays a role in case of crises abroad, which affect German nationals or German interests. The AA is also the national contact point for requests on assistance from third countries. Contact point for requests from the EU Civil Protection Mechanism is the BMI.

In general, Civil Protection and disaster management in Germany is to a high degree based on the availability of people with an honorary post.

Table of Contents

G E R M A N Y Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	770
Overview.....	771
Table of Contents	772
List of Figures	774
List of Abbreviations.....	774
1 Policy	775
1.1 Risk Assessment	775
1.2 Policy and Governance	775
1.2.1 Strategy scope and focus.....	776
1.2.2 Monitoring and analytical support to policy making; R&D	776
1.2.3 Policy for Prevention	776
1.2.4 Policy for Preparedness	777
1.2.5 Policy for Response	777
1.2.6 Policy for Relief and Recovery	777
1.3 Financing	777
1.3.1 Investing in preparedness	777
1.3.2 Investing in consequence management.....	778
1.4 Policy review, Evaluation & Organisational Learning	778
1.4.1 Post-Disaster Assessment.....	778
1.4.2 Departmental Lessons Learned systems	778
1.4.3 Centralised (national) Lessons Learned system	779
1.4.4 International exchange for Lessons Learned.....	779
1.4.5 Regular policy reviews	780
1.5 Resilience	780
1.6 Information sharing and data protection	780
2 Legislation	782
2.1 Crisis (emergency, disaster) management concept.....	782
2.2 General crisis (emergency, disaster) management law	782
2.3 Emergency rule	783

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	783
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	784
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	784
2.7	Legal regulations for international engagements of first responders and crisis managers	784
3	Organisation	785
3.1	Organisational chart	785
3.2	Organisational cooperation	789
4	Procedures	792
4.1	Standing Operating Procedures (SOPs) and Guidelines	792
4.2	Operations planning	792
4.3	Logistics support in crises	792
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	793
5	Capabilities	795
5.1	Human resources	795
5.2	Materiel (non-financial) resources	795
5.3	Training	795
5.4	Procurement	796
5.4.1	Procurement regulation	796
5.4.2	Procurement procedures	797
5.5	Niche capabilities	797
	Resources	798
	Legislative acts	798
	Other normative acts	798
	Official documents (white papers, strategies, etc.)	798
	Online resources (e.g. websites of key CM organizations)	799
	Publications	800
	Expert interviews	802

List of Figures

<i>Figure 1: Organisation of Civil Protection in Germany</i>	786
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List of Abbreviations

AA	Federal Foreign Office
AKNZ	Academy for Crisis Management, Emergency Planning and Civil Protection
BMBF	Federal Ministry of Education and Research
BBK	Federal Office of Civil Protection and Disaster Assistance
BMF	Federal Ministry of Finance
BMG	Federal Ministry of Health
BMI	Federal Ministry of the Interior
BMUB	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BMZ	Federal Ministry for Economic Cooperation and Development
CIMIC	Civil-Military Cooperation
CIP	Critical Infrastructure Protection
CM	Crisis Management
DFG	German Research Foundation
MS	Member State
THW	Federal Agency for Technical Relief

1 Policy

1.1 Risk Assessment

While there is no overall record on disasters on federal level in Germany, it can be noted that most recent major disasters have been caused by extreme weather conditions – storms (e.g. storm Kyrill in 2007, 11 dead; storm Felix in 2006, 10 dead), floods (e.g. in 2013 affecting several rivers, 8 dead; in 2002 affecting especially the Elbe, 27 dead), and heat waves (e.g. in 2003, 9.355 dead) (EM-DAT 2014; EC 2014; Badische Zeitung 2014). Further prominent examples are the interruption of the energy supply in the region of Münsterland (North-Rhine-Westphalia) for several days in 2005, or the ICE train accident in Eschede in 1998, 101 dead (EC 2014).

All these crises, however, did not pose a direct threat to the functioning of the state as a whole (Hegemann & Bossong 2013).

Following the terrorist attacks on 11 September 2001, and the severe flood in Germany in 2002, the “New Strategy on Civil Protection” has been enacted in 2002, providing the new political-strategical framework programme in civil protection. Amongst others, this strategy underlines the need for a coherent method for risk analyses between the federal and the state level (BBK 2010a).

Following the Civil Defence and Disaster Assistance Act (ZSKG), the federal level, supported by the states, conducts country wide risk analyses for civil protection, across different sectors. Reports from 2010, 2011, 2012, and 2013 describe the respective status of these risk analyses (Deutscher Bundestag 2013). The Federal Office of Civil Protection and Disaster Assistance (BBK) issued detailed methodological guidance (BBK 2010b). However, the implementation of this risk assessment methodology on state or communal level depends on the initiative of the respective governments, which diverge strongly with regard to their commitment and organisational capacities (Hegemann & Bossong 2013).

1.2 Policy and Governance

Germany is a federal republic consisting of 16 constituent states (*Bundesländer* or *Länder*), in the following referred to as states. States have their own government and parliament and possess a high degree of autonomy, especially in the areas of education, police, local administration, transport, and some medical measures. They receive income gained through taxation (revenues). Through the constitutional organ “Bundesrat” the states participate in legislation, administration and matters concerning the European Union. Subsequent governmental levels are the administrative counties (*Landkreise*) or county boroughs (*kreisfreie Städte*) – combined in administrative districts –, and the municipalities (*Kommunen*) (MSB 2009). The municipalities administrate inter alia local transport and road construction, electricity, water and gas supply, sewerage and daily life protection (EC 2014). The principle of subsidiarity has to be applied wherever possible. As given in the German Basic Law

(*Grundgesetz*, comparable to a constitution) and in the Treaty of Lisbon, the states play an active role in the decision making process regarding the German EU policy.

1.2.1 Strategy scope and focus

The “New Strategy on Civil Protection” (see above) provides the new political-strategical framework programme in civil protection. It has been updated in 2010 (BBK 2010a). Main goal of the strategy, which still provides the foundation for the new understanding in civil protection, is an optimized collaboration of the federal level and the states in preparation to and coping with disasters relevant on national level (ibid).

However, crisis management approaches in Germany do not follow the clustering by the terms Prevention, Preparedness, Response and Recovery, while with regard to contents, all of these topics are covered. No special focus on one or a few of them can be identified (expert interview).

1.2.2 Monitoring and analytical support to policy making; R&D

There are several R&D programmes that contribute to risk assessment supporting policy making. On national level, there is e.g. the “Research Programme for Civil Security” from the Federal Ministry of Education and Research (BMBF). Its purpose is “to develop innovative solutions that increase civil security while maintaining a good balance between security and freedom. What makes the programme special is that, rather than just being concerned with technology, it includes innovative organisational approaches and strategies for action. The success of the security research programme depends on interdisciplinary projects, knowledge transfer to the general public, social science research on data protection and ethics and transparency. The programme is also integrated in a European framework” (BMBF 2014).

Further, research benefiting civil protection is entrenched in section 4 subsection 1 No. 5 of the Civil Defence Act (“Zivilschutzgesetz”) as a task for the Federation:

“The following shall be in particular incumbent on the Federal Office of Civil Protection and Disaster Assistance...

5...the tasks for technical and scientific research in agreement with the Länder, the evaluation of research results, as well as collection and evaluation of publications in the field of civil defence.”

“Research at the Federal Office of Civil Protection and Disaster Assistance offers scientifically-sound problem solutions for civil protection, as well as new concepts, procedures and technology, and hence makes a major contribution towards upgrading civil protection mechanisms” (BBK 2014).

1.2.3 Policy for Prevention

As mentioned under 1.2.1, crisis management approaches in Germany are usually not clustered by the terms Prevention, Preparedness, Response and Recovery, while with regard to contents, all of these topics are covered (expert interview).

Prevention is part of the civil protection in Germany. Organisations responsible for prevention work closely together with those responsible for preparedness and/or response (European Commission 2014), see also chapter 3.1.

1.2.4 Policy for Preparedness

As mentioned under 1.2.1, crisis management approaches in Germany are usually not clustered by the terms Prevention, Preparedness, Response and Recovery, while with regard to contents, all of these topics are covered (expert interview).

See chapter 3.1 for organisations and responsibilities in crisis management.

1.2.5 Policy for Response

As mentioned under 1.2.1, crisis management approaches in Germany are usually not clustered by the terms Prevention, Preparedness, Response and Recovery, while with regard to contents, all of these topics are covered (expert interview).

See chapter 3.1 for organisations and responsibilities in crisis management.

1.2.6 Policy for Relief and Recovery

For organisations and responsibilities in crisis management see chapter 3.1.

There is no specific regulation on relief and recovery in Germany. Responsibility is with the states, who would request support from the federal level, if needed. Financial support from federal level would be released by the Federal Ministry of Finance (BMF). For international requested financial support, the Federal Ministry for Economic Cooperation and Development (BMZ), and the Federal Foreign Office are in charge. From EU level, the Solidarity fund can provide financial support, while there is no such fund on national level in Germany (expert interview).

1.3 Financing

1.3.1 Investing in preparedness

The report on Germany conducted in context with the “Outline for national reporting and information on disaster reduction for the World Conference on Disaster Reduction” (Kobe-Hyogo, Japan, 18-22 January 2005)¹¹⁰¹ lists the following budgets in the context of disaster risk reduction: The Federal Foreign Office (AA) has a regular annual budget for disaster prevention projects, and also the Federal Ministry for Economic Cooperation and Development (BMZ) funds programmes on

¹¹⁰¹ Outline for national reporting and information on disaster reduction for the World Conference on Disaster Reduction (Kobe-Hyogo, Japan, 18-22 January 2005), Report Germany 2004, <http://www.unisdr.org/2005/mdgs-drr/national-reports/Germany-report.pdf>

disaster reduction, especially a sector programme to incorporate risk reduction into development projects. The Ministry of the Interior (BMI) funds disaster preparedness structures. Further, two institutions are mainly funding disaster prevention research: the Federal Ministry for Education and Research (BMBF) and the German Research Foundation (DFG).

However, no specific number for investments in preparedness and consequence management (chapter 1.3.2) could be identified. The total number would include budgets from different departments of several organisations, e.g. from those named above, or the Federal Agency for Technical Relief (THW), the Federal Ministry of the Interior (BMI), the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), or the Federal Ministry of Health (BMG). Further, investments in vaccines, and also donations would need to be considered (expert interviews). These specific numbers are not available.

1.3.2 Investing in consequence management

As explained in chapter 1.3.1., specific numbers are not available.

In the first place, individuals are expected to cover their costs on their own. Then, money from insurance and reinsurances contribute to cover costs of recovery, and specific funds from EU (Solidarity fund) and national level (from BMF) help to cover costs of consequence management (expert interviews).

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The information gained on post-disaster assessment is closely linked to information on lessons learned systems, and is thus included in chapter 1.4.3.

1.4.2 Departmental Lessons Learned systems

There are Lessons Learned systems on departmental level, while overarching information is not available. For example, federal state governments can request evaluation of missions after a crisis, while there is no general regulation. Organisations are handling their Lessons Learned differently, and also differently for different types of crisis. There is no general or common methodology. The THW for example distinguishes between national and international missions. International missions are less complex or more comparable to each other. For the lessons learned in these international 'standard' missions, the THW uses prepared sheets to be filled in during the mission. Also for national missions, data is usually collected already during missions, but adapted to the current operation (expert interviews).

See also chapter 1.4.3.

1.4.3 Centralised (national) Lessons Learned system

There is no centralised Lessons Learned system in Germany. The LÜKEX exercises (see chapter 5.3) are main sources for identification of improvement needs, they are partly conducted together with neighbouring countries, e.g. The Netherlands, and are also observed by EU delegates. Connections to international Lessons Learned are not institutionalised, but respective reports from other countries are in fact considered and evaluated (expert interview).

The following two paragraphs are mainly taken from the country study Germany, which has been prepared in the context of the ANVIL Project¹¹⁰² (Hegemann and Bossong 2013):

One major investigation, the “Kirchbach Report” (Kirchbach et al. 2002) was conducted after the signature crisis Elbe Flood in 2002. It was commissioned by the State of Saxony, focused on regional flood defence mechanisms, but also discussed the general effectiveness of the German civil security system. The report attested a high level of technical competence to first responders and specialised civil protection forces, while the support of military units in upgrading and defending dams was also praised. Thus, the basic principles of the German disaster and crisis response system’s effectiveness, namely a decentralised approach that builds on local capacities¹¹⁰³, were defended. Yet the report also highlighted severe coordination failures across district-level and state-level structures.

At the level of state governments, one could point to ministerial reports on the handling of regional crises, such as storm damages and power failures in 2005-7 (Landesregierung NRW 2010). However, these internal reports did not generate wider attention within Germany's civil security system. The German response to the H1N1 and EHEC epidemics, which generated wide-spread media attention as well as political debates, could be seen as the main exception (Deutscher Bundestag 2011). In the aftermath, professional actors in the health sector and the RKI meticulously documented their actions and worked towards improved coordination, risk assessment and public communication processes (Krause et al. 2010, RKI 2011). This fed into on-going discussions among German emergency professionals on how to revise risk communication strategies to be able to tackle complex emergencies and changing public attitudes (Weinheimer 2011).

1.4.4 International exchange for Lessons Learned

See under 1.4.3: Reports from other countries are considered and evaluated. LÜKEX exercises, being main source for identifying improvement needs, are partly conducted together with neighbouring countries, e.g. The Netherlands (expert interview).

¹¹⁰² Analysis of Civil Security Systems in Europe, <http://anvil-project.net/>

¹¹⁰³ Even though civilian actors needed to be temporarily reinforced by military units. It may be noted that the president of the investigative committee, Kirchbach, was the chief military commander that supported the response to the Elbe flood.

1.4.5 Regular policy reviews

There are no regular policy reviews, but they are conducted following specific occasions. One prominent example is the policy change regarding nuclear power energy after the nuclear disaster in Fukushima 2011 (expert interview).

1.5 Resilience

The concept of resilience has recently been discussed intensively in the academic field. Operationally, the concept is not directly applied, but there are approaches to consider this trend, e.g. as described in a “strategy on future topics in technology” (acatech 2014) (expert interview).

- *Do CM organization, local community and private business apply related standards, e.g. ISO 22301 "Business Continuity Management - Requirements" or any other (formal or industrial) standards? Please specify.*

ISO 22301 "Business Continuity Management - Requirements" is applied by internationally operating organisations (expert interview).

1.6 Information sharing and data protection

1.6.1 Please describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection

Standards on data exchange are currently being developed, e.g. the BBK identified a gap regarding XML interfaces for data sharing in bi- or multinational cooperation and is currently working on a related project. By now, there is no legal basis for collecting data on e.g. spots at risk, critical infrastructures, human or material resources. Data exchange happens, but there is no formal regulation for this (expert interviews).

1.6.2 Does the country/IO have registers/databases of volunteers? If yes, under what circumstances can data be used/ shared? e.g. particular capabilities, level of readiness/ availability, contact information

Volunteers are registered with different organisations (see chapter 3.1), where respective information is stored. There is no overall database.

1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. “crowd sourcing” and “crowd tasking”, "citizen as a sensor")

The guideline on crisis communication (only available in German) from the Federal Ministry of the Interior also includes some guidance on the use of social media during crisis (BMI 2014), but in general, the use of social media (Twitter, Facebook) for both information provision and data collection (e.g. track the outbreak of epidemics) remains very limited (Hegemann & Bossong 2013).

It has been an important topic in research, while the actual use is still under development. There is more and more education of personnel, e.g. for spokespersons, who are increasingly under pressure due to quick information that is spread through twitter or other social media (expert interview).

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The states are responsible for “peacetime” disasters (see chapter 2.2), and have their own laws on disaster protection. These laws are listed and provided on the BBK website (BBK 2014b).

2.2 General crisis (emergency, disaster) management law

The following paragraph is mainly taken from the deliverable D2.1 “Report on current CM framework” of the ACRIMAS project¹¹⁰⁴ (Vollmer et al. 2012):

The division of power and assignment of responsibilities is defined in the **German Basic Law** (*Grundgesetz*, 1949). Relevant articles are:

- Article 30, 70 ff, 73 (1) no. 1: Division of legislative powers, the states are responsible for governmental tasks as e.g. threat prevention measures, taken by the police and other government agencies.
Threat prevention measures and related legislation (fire prevention, fire services, police) are competence of the states, as long as these do not involve defence/ protecting civilian population against war-related hazards (→ “peacetime” disasters, e.g. natural disasters, terrorist attacks). The Federal Government may supplement with wartime equipment that can be used during peacetime (e.g. NBC-Vehicles). Emergency planning in the event of war incl. war-related hazards or threat thereof is competence of the federal state. Wartime measures for Civil Protection are, however, carried out by the states on behalf of the federal government (Article 73 (1)).
- Article 35 (2): States can call assistance of police forces of other states and of personnel and facilities of other administrative authorities, such as the Federal Police, the Armed Forces (Bundeswehr), or the Federal Agency for Technical Relief (THW).
- Article 35 (3): In cases of major natural catastrophes or accidents, the Federal Government may instruct state governments to provide other states with assistance. It also may employ the Federal Police and the Armed Forces to support the states.
- Article 80a (1), Art. 115 a: Emergency laws can be applied in the case of severe tensions, the event of an armed conflict or the threat thereof.

As threat prevention measures (in peace time) are competence of the states, relevant regulations are **laws on state level**. They are listed and provided on the BBK website (BBK 2014b). Some states have

¹¹⁰⁴ Aftermath Crisis Management System-of-systems Demonstration Phase I, <http://www.acrimas.eu/>

separate laws on fire prevention and fire-fighting, rescue and disaster management (e.g. Bavaria), others have a single law that covers all (e.g. Hessen). In addition, the states have legislations on the police.

The **Federal Law on Civil Protection and Disaster Relief (2009)** was enacted to optimize the collaboration between federal and state level in disaster management.

It provides regulations regarding the provision of the states with Civil Protection resources of the federal government and the opportunity of a coordinated disaster management through the federal government.

2.3 Emergency rule

The following paragraph is mainly taken from the country study Germany, which has been prepared in the context of the ANVIL Project ¹¹⁰⁵ (Hegemann and Bossong 2013):

Under the German Basic Law, the declaration of a formal state of emergency at the federal level is reserved to internal and external armed conflicts, or serious (and intentional) threats to the “free democratic order”, and requires a two-third majority in national parliament. In this situation, it is possible to curtail numerous civil rights and expand the role of the federal government, including the deployment of the federal police and the armed forces (Art. 91 and 87a GG). Legal scholars have rejected the view that a natural disaster or a serious accident could qualify as a formal internal state of emergency, except for the unlikely case that an accident or a natural disaster causes situations that are comparable to civil war (Sattler 2008). Due to the absence of such large-scale violent unrest, Germany has hitherto not declared such a state of emergency.

In contrast, a state of disaster can be declared at the level of counties, cities or intermediary administrative districts by the respective chief administrative officers, which does not authorise wide-spread derogation to civil rights or to act outside regular legislative and judicial control (Kloepfer 2007). At the operational level, emergency responders nevertheless enjoy a considerable sphere of discretion. Based on a “blanket clause” (*Generalklausel*) that is typically included in state laws responsible agencies can take all measures they deem necessary for the fulfilment of their crisis management duties, as long as they remain within the confines to normal legal constraints such as the proportionality principle (Musil and Kirchner 2006).

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

There are specific working rules (Dienstvorschriften), often not publically available, which define the procedures within the respective organization in case of a crisis (expert interview).

¹¹⁰⁵ Analysis of Civil Security Systems in Europe, <http://anvil-project.net/>

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

For regulations on state level, see chapter 2.2. Lower levels have not been investigated.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Following the Civil Defence and Disaster Assistance Act (ZSKG), rights and duties of helpers in civil protection are generally regulated in the laws on disaster protection on state level (listed and provided on the BBK website, BBK 2014a).

2.7 Legal regulations for international engagements of first responders and crisis managers

On UN level, UN OCHA regulations apply; for EU operations, respective EU regulations apply. Decisions on international engagements are taken by the AA, who requests capacities from different organisations (e.g. THW, German Armed Forces). These organisations provide the respective information, afterwards, the decision is taken, which is often also influenced by political reasons. Insurance is usually organised by the respective organisation (expert interviews).

3 Organisation

3.1 Organisational chart

The following descriptions are mainly taken from the deliverable D2.1 “Report on current CM framework” of the ACRIMAS project¹¹⁰⁶ (Vollmer et al. 2012):

Crisis management at national level

At the national level first of all the Federal Ministry of the Interior (BMI), assisted by the Federal Office of Civil Protection and Disaster Assistance (BBK) and the German Federal Agency for Technical Relief (THW) are the core institutions responsible for CM.

The Federal Foreign Office (AA) plays a role in case of crises abroad, which affect German nationals or German interests. The AA is also the national contact point for requests on assistance from third countries. Contact point for requests from the EU Civil Protection Mechanism is the BMI.

During a peacetime disaster affecting several states or a long term crisis the BMI may set up an inter-ministerial coordination group consisting of representatives of the BMI and other Federal Ministries, depending on the type of disaster (typically the contact persons for CM and counter-terrorism). The Federal Ministries are prepared to call up specific task forces at short notice, especially the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), in case of serious threats involving the illegal use of radioactive materials, and the Federal Ministry of Health (BMG), in case of pandemics and bioterrorism (EC 2014; BMI 2012).

The BBK conducts conceptual work on fundamentals in CM, including the evaluation of missions, exercises and findings in research. In addition, the BBK provides operational instruments:

- A Joint Information and Situation Centre (GMLZ) for efficient coordination of large area disasters,
- A web-based Emergency Preparedness Information System deNIS I + IIplus¹¹⁰⁷,
- A warning centre with a satellite based warning system (SatWaS),
- A Centre for the coordination of aftercare and for support of victims and their relatives (NOAH) (BBK 2014b).

During a military crisis the states are responsible for coordination within their respective areas, although the BMI gives respective orders. The federal planning in this case consists of measures to ensure continuity and social functions (continuity of government, Civil Protection, supply of goods and services, support of the Armed Forces).

The capability for Civil-Military Cooperation (CIMIC) has to be ensured at all ministerial levels, incl. planning, training, exercises. The BBK’s Academy for Crisis Management, Emergency Planning and Civil Protection (AKNZ) provides obligatory education for CIMIC personnel of the Armed Forces.

¹¹⁰⁶ Aftermath Crisis Management System-of-systems Demonstration Phase I, <http://www.acrimas.eu/>

¹¹⁰⁷ <https://www.denis.bund.de/>

Regular discussions of preparations for peace- and war-times disasters between civilian and military authorities are conducted (MSB 2009).

Crisis management at sub-national level

In Germany, the first authority in the event of a peacetime disaster is the cognisant rural district, county or municipality. Respective authorities manage local response assisted by (if necessary) representatives of other authorities, services, organizations. For the technical and tactical execution a director of operation, assisted by a staff composed of the involved organizations and units (e.g. police, fire department, non-governmental organisations, private enterprises) is appointed. In case a disaster exceeds capacities of the local government or affects several districts, the next highest hierarchical authority ensures coordination (MSB 2009).

If needed, a state can call for the assistance of police forces of other states or of personnel and facilities of other administrative authorities, of the Federal Police or the Armed Forces. Also, the Federal Agency for Technical Relief (THW) may be called.

In the “New Strategy on Civil Protection” (enacted in 2002, see above), the states agreed amongst others on standardizing recommendations for command and control structures (e.g. through a common “Fire Services Regulation 100”; guidelines for setting up administrative-organizational task forces) (BMI 2012).

Figure 1 illustrates the role of the different levels of government in Germany in Civil Protection and disaster response:

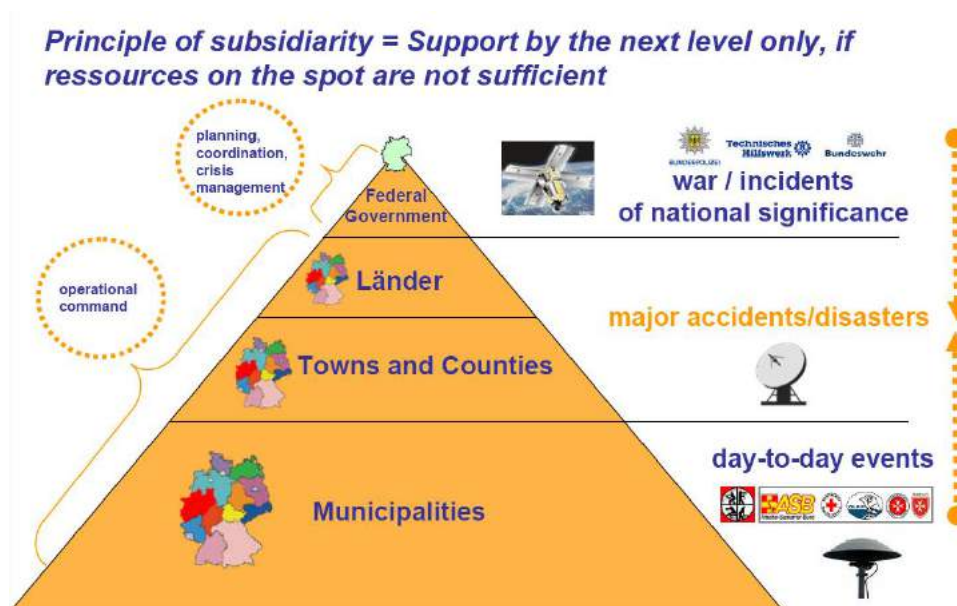


Figure 1: Organisation of Civil Protection in Germany¹¹⁰⁸

¹¹⁰⁸ The public alert system in Germany, Dr. Miriam Haritz, Head of the president's Office BBK: 8th GESA Conference in cooperation with EURALARM, Brussels, 16 June 2011. (taken from the ACRIMAS deliverable 2.1 Report on CM framework)

In general, Civil Protection and disaster management in Germany is to a high degree based on the availability of people with an honorary post. This leads to a comparatively high degree of tolerance and independence, but also to the fact that the availability of personnel is dependent on preferred recreational activities of the population, which might change over time. Also, the demographic change in Germany will have an impact on the availability of volunteers in the future.

Main parts of the following are taken from the country study Germany, which has been prepared in the context of the ANVIL project¹¹⁰⁹ (Hegemann & Bossong 2013), and from the “Vademecum for Civil Protection”, provided by DG ECHO (EC 2014):

Strict limitations on the military in domestic crises

Due to Germany’s historical experience under Nazi rule, the distinction between internal and external security and between civilian and military forces is deeply encoded. The domestic deployment of the armed forces is confined to especially severe disasters or the hitherto hypothetical scenario of a state of emergency that would be constituted by intentional threats and wide-spread violence. In practice, military assistance has to date been limited to, and not required beyond, short-term technical and logistical support for civilian authorities in response to exceptional natural disasters. The military would not be used for the maintenance of public order or beyond what could potentially be done by civilian responders who maintain overall command.

The role of the military in Germany also exemplifies how legal accountability may be maintained in the face of extreme threat scenarios. The attacks of 11 September 2001 led to calls for the employment of the *Bundeswehr* to protect potential targets, such as government buildings, and assist civil security agencies in the response to attacks, for instance through its CBRN units. The most controversial debates pertained to a law that would have allowed for the shooting down of hijacked airplanes. The Aviation Security Act, which was passed in 2005, was declared unconstitutional by the Constitutional Court only a few months later because it violated the right to life and especially the right to human dignity, which is enshrined in Article 1 of the Basic Law. According to the court, authorities could not pit the dignity of people in a potential target of the plane against the dignity of the people on the plane.

Volunteers; Role of societal/non-profit organisations/NGOs

The German civil security system officially and strongly relies on non-profit relief organisations and their volunteer staff. Their main task is emergency and crisis response through medical, rescue and ambulance services on behalf of public agencies. Most management tasks and everyday emergency services are carried out by professional staff, but volunteers remain essential for membership fees, training, public outreach, and more exceptional crisis management situations. Thus, non-profit organisations are included in all public crisis management structures and exercises, but retain their independent character and have to bear the costs of crisis operations. However, depending on their size and scope of activities, they receive official financial compensation.¹¹¹⁰ Despite the continuingly

¹¹⁰⁹ Analysis of Civil Security Systems in Europe, <http://anvil-project.net/>

¹¹¹⁰ That is, in addition to organizational membership fees. Regular emergency services are also paid for, such as by health insurances.

high number of volunteers, voluntary organisations face increasing challenges from various societal trends, as mentioned above.

The most important non-profit actors are the German Lifeguard Association (DLRG), the German Red Cross (DRK), the Order of Malta Ambulance Corps (*Malteser*), the St. John Accident Assistance (JUH), the Worker's Samaritan Federation (ASB), and the German Maritime Search and Rescue Service (DGzRS). The role of the DRK is illustrative in comparison with other countries. It constitutes a legally privileged actor in some respects, but otherwise closely corresponds to other non-profit actors in Germany. In 2011 the DRK had 3.38 million members with about 400,000 active volunteers (including youth groups) and a professional staff of 140,342 (DRK 2012). It is divided into 19 state associations.¹¹¹¹ There are 513 county branches and 4,609 local branches. Moreover, the DRK distinguishes five special sub-chapters dealing with emergency preparedness, mountain rescue, lifeguard service, youth work and social welfare. The local branches carry the primary responsibility for all operational tasks, including especially ambulance and rescue services. The federal office aims to ensure coordination and coherence (DRK 2012). These chapters are part of a "complex assistance and rescue system" (DRK 2011). The DRK's emphasis is on crisis response through its emergency and rescue services, but they also contribute to preparedness through research and first aid training (Lange et al. 2012).

In addition, volunteers work in voluntary fire brigades. The German Firefighter Association (DFV) represents the interests of the German fire brigades national-wide and abroad.

Further, important NGO's are the "Deutsches Komitee Katastrophen Vorsorge" (DKKV), the „Ständige Konferenz für Katastrophenvorsorge und Bevölkerungsschutz" (SKK), and the „Bergwacht" (Mountain Rescue Experts).

Role of private/profit-oriented organisations

In the field of the protection of Critical Infrastructures (CIP) as a part of civil protection, Germany closely cooperates with critical infrastructure providers on sectorial as well as on cross-sectorial issues, usually in a less formalized way. These providers represent different CI-sectors (e.g. provision of electricity/ energy transmission, rail traffic, financial services, water supply (further information in available in the National Strategy on CIP (2009)¹¹¹²).

Close cooperation exists in the field of the protection of IT-infrastructure (CIIP, see also the "National Plan for Information Infrastructure Protection"¹¹¹³).

Germany has highly developed regime of health and safety regulation as well as more general liability rules to protect employees, citizens, buildings, infrastructures and other privately-owned assets from harm and accidents. In line with EU law, privately-owned sites that can pose wider risks maintain special emergency plans and first response mechanism, such as plant fire brigades. Further market mechanisms for emergency and disaster management (e.g. mandatory insurance against flood) have been suggested, but are not yet part of the German civil security system (Schwarze and Wagner 2008).

¹¹¹¹ There are two organisations for Baden-Württemberg, North-Rhine Westphalia, and Lower Saxony respectively due to historic reasons.

¹¹¹² http://www.bmi.bund.de/cae/servlet/contentblob/598732/publicationFile/34413/kritis_englisch.pdf

¹¹¹³ https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/Kritis/National_Plan_for_Information_Infrastructure_Protection.pdf?__blob=publicationFile

In non-regular emergency situations, state actors and security authorities bear responsibility for response operations, but can require private actors to provide additional assistance. This mainly pertains to the granting of priority access to, and maintenance of, essential services or goods. Beyond utility companies (power, water, fuels, telecommunications), this can apply to transport companies, apothecaries and pharmaceutical corporations.¹¹¹⁴ The maintenance of stockpiles and the distribution of emergency foodstuff remain an exclusive competence of state actors.¹¹¹⁵

While the restoration of power, transport and infrastructures has been a core mission of the THW since its establishment in the 1950s, state representatives have recognized the need for deeper engagement with private industry in the area of critical infrastructure and cyber-security. Since 2005, related strategy documents call for private inputs to detect new vulnerabilities and ensure the required technological expertise (BMI 2005, 2009b, 2011). Aside from numerous consultation rounds and preventive efforts, a notable result has been the private involvement in a 2011 national civil emergency exercises on cyber-attacks and food crises (Borchers 2011).

However, for the most part public actors maintain a distant approach, whereby private companies are expected to implement additional security measures (BMI 2011b), whereas they receive no direct compensation or influence on security planning. Private companies are also not widely mentioned as security partners for emergency preparedness.

3.2 Organisational cooperation

Main parts of the following descriptions are taken from the deliverable D2.1 “Report on current CM framework” of the ACRIMAS project¹¹¹⁶ (Vollmer et al. 2012):

Collaboration between national and sub-national levels of administration

In Germany, in case they ask for support, local and regional authorities as well as the states are supported by the federal government with (a) its own operational forces (Federal Agency for Technical Relief (THW), the Federal Police, and the Armed Forces (with limitations as regards the use of weapons)) and (b) services provided by the Federal Office of Civil Protection and Disaster Assistance (BBK) (MSB 2009).

All Civil Protection authorities contribute to the planning, administration, material & resources to the prevention of, disaster management during, and recovery from all kind of disasters as well as during armed conflicts.

Efficient interaction between federal and state CM is practiced in interministerial, interstate exercises (LÜKEX) on a biennial basis (BMI 2012), see also chapter 5.3.

CIMIC (see also paragraph on *Crisis Management at national level* in chapter 3.1) at regional level is ensured by joint planning for regional crisis, local training and exercises (MSB 2009).

¹¹¹⁴ For legal bases, see Kloepper (2009).

¹¹¹⁵ This traditional aspect of civil defence planning is regularly criticised, but has not been replaced by public-private partnerships. It is also worth mentioning that oil companies are to maintain a strategic stockpile of gasoline, whereas strategic gas reserves (for heating and power generation) are based on a voluntary agreement among corporations.

¹¹¹⁶ Aftermath Crisis Management System-of-systems Demonstration Phase I, <http://www.acrimas.eu/>

An Interministerial Coordination Group provides an important supplement to the setup that coordinates between the state and federal levels in case of threats that affect more than one state over a long period of time (e.g. accidents at nuclear power plants, pandemics and major natural disasters) (BMI 2012).

Collaboration with critical infrastructure providers

See last paragraph in chapter 3.1. Further, the Federal Ministry of the Interior (BMI) provides recommendations (in German) on how to ensure collaboration between crisis management on governmental level and critical infrastructure operators. It presents requirements for governmental institutions as well as the critical infrastructure operators when reacting to and coping with a crisis in order to assure an effective collaboration (BMI 2010).

Bilateral agreements, international assistance and collaboration with the EU

Germany is part of twelve bilateral support agreements (with its nine neighbouring countries plus Latvia, the Russian Federation and Hungary) that in some cases also include joint training and exercises and supports the development of new CM structures in Europe and third states (e.g. China). The agreements are available for download on the homepage of BBK.¹¹¹⁷

The information management for international assistance works as follows:

- In case of requests from the EU Emergency Response Coordination Centre (EERC), the Joint Information Centre (GMLZ) is the national contact point.
- In case of requests from third countries, the Federal Foreign Office is the first contact point.
- The BBK with its Joint Information Centre (GMLZ) provides information about the availability of appropriate resources to the BMI, the Foreign Office and the requesting state (EC 2014).

It is planned, however, to enable requests in the future directly via the BBK without engaging the Foreign Office or the BMI.

In general, Germany opts for the principle of subsidiarity for CM, also on European level. Based on the national approach, Germany advocates similar procedures on EU level: In order to limit coordinative and cooperative hurdles, the management of a crisis should be executed by the authority whose territory is affected. The local management might, however, be supported through provision of personnel and equipment by higher government levels or other EU MSs (BMI 2009).

The Academy for Crisis Management and Civil Protection (AKNZ) of the BBK offers training and education on the basis of the EU training & education system. The GMLZ (see above) operationally coordinates with the EERC (BMI 2009).

In events that require a coordinated response by EU MSs, the Secretariat General of the EU Council calls together the members of the EU Crisis Steering Group. The MSs concerned send their permanent representative or other specially designated representative to this group. Agreements have been made to ensure the flow of information between the Federal Foreign Office, the Federal Ministry of the Interior and other affected ministries as needed (BMI 2012).

¹¹¹⁷ http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/FIS/DownloadsRechtundVorschriften/Katastrophenhilfeabkommen/Gesamtliste%20der%20Abkommen.pdf?__blob=publicationFile

Concerning events outside the EU, the THW was, amongst others, engaged in international disaster relief operations in China, Myanmar, Ecuador, Moldavia, Haiti and Japan. The THW provides rapid reaction forces for Search & Rescue operations as well as for water supply. Additionally, further critical resources and experts may be provided. In general, the THW may act upon request of the Ministry of Foreign Affairs, the EU and UN in areas as ad-hoc humanitarian aid, relief and reconstruction (BMI 2009).

The THW is the main public organisation in Germany, which contributes to international emergency operations. In the context of the EERC, it lists 14 specialised units for the EU's civil protection mechanisms. The THW also regularly contributes to EU exercises and research project. Since December 2006, it has been appointed by the European Commission as coordinator for the EU Exchange of Experts in civil protection (Hegemann and Bossong 2013).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

There are SOPs in terms of disaster protection plans (“Katastrophenschutzpläne”) for specific areas, e.g. pandemics¹¹¹⁸, nuclear power (emergency plans), or mass casualty incidents (expert interview).

These specific plans for special disaster situations like storm surges supplement the normal disaster contingency plans (see 4.2). For this, states request plans for supporting the state disaster management from the local authorities¹¹¹⁹.

4.2 Operations planning

The report on Germany¹¹²⁰ conducted in context with the “Outline for national reporting and information on disaster reduction for the World Conference on Disaster Reduction” (Kobe-Hyogo, Japan, 18-22 January 2005) states that there are disaster contingency plans in place at Länder (states) level. Each Land has its own law and its own plan. Lower Saxony for example, has a uniform structure for plans, which have to be developed by all disaster relief agencies, containing relevant contact persons, materials, capacity in hospitals and assignment of relief units. This common structure enables the collective coordination at state level.¹¹²¹

4.3 Logistics support in crises

Main parts of the following descriptions are taken from the country study Germany, which has been prepared in the context of the ANVIL project¹¹²² (Hegemann and Bossong 2013):

With regard to emergency *logistics*, German authorities can utilise, but also have to protect a very dense network of road, rail, water and air transportation. Respective federal regulatory authorities (e.g. the German Authority for Freight Transport) maintain links with the BBK through the web-based Emergency Preparedness Information System deNIS (see chapter 3.1). The decentralised organisation of the civil security system adds a layer of resilience, as emergency response capacities do not regularly have to be brought in over long distances. The THW adds substantial logistical capacities for disaster management, including sixty-six specialised logistic units at the regional level (THW n.d.). In especially severe crises, the German army may provide additional logistical help through its so-called

¹¹¹⁸ E.g. national plan on pandemics: http://www.rki.de/DE/Content/InfAZ/I/Influenza/Pandemieplanung/Nationaler_Influenzapandemieplan.html

¹¹¹⁹ Outline for national reporting and information on disaster reduction for the World Conference on Disaster Reduction (Kobe-Hyogo, Japan, 18-22 January 2005), Report Germany 2004, <http://www.unisdr.org/2005/mdgs-drr/national-reports/Germany-report.pdf>

¹¹²⁰ see ¹⁹

¹¹²¹ http://www.mi.niedersachsen.de/portal/live.php?navigation_id=14969&article_id=62914&psmand=33

¹¹²² Analysis of Civil Security Systems in Europe, <http://anvil-project.net/>

territorial network (Baumgard 2012), as has been the case during the 2002 Elbe flood. Additional legal provisions allow for the requisition of private actors for logistical purposes, for example up to 12,000 trucks from freight companies (Bundesamt für Güterverkehr 2009), but have not been used at the federal level to date.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The Federal Ministry of the Interior (BMI) provides a guideline on crisis communication (only available in German, BMI 2014). Main goal of this guideline is to mentally instruct responsible personnel in agencies and companies for planning crisis communication. The guideline encompasses instructions on how to develop a crisis communication plan (BMI 2014).

In general, the responsible institution (depending on the type of crisis, see under 3.1) is also coordinating crisis communication to the public, while actually a “one-voice policy” applies. This policy is not always followed (expert interview).

Main parts of the following are taken from the country study Germany, which has been prepared in the context of the ANVIL project¹¹²³ (Hegemann and Bossong 2013):

German security organisations are in the process of transforming their emergency *communication* system, which can be summarised under three components. First, the German emergency law on telecommunication and postal services foresees prioritised access and special capacities for emergency responders. Since the end of the Cold War, the activation threshold has been lowered from a formal state of emergency to natural or technological disasters and terrorist attacks. Second, German security actors aim to integrate their different analogue radio networks, which experienced severe capacity limits during the major 2002 Elbe flood, into an integrated digital communication system. The introduction of the system is overseen by the newly created Federal Agency for the Digital Radio of Agencies and Organisations with Security Tasks (BDBOS).¹¹²⁴ Third, the BBK created the central web platform deNIS¹¹²⁵ (see chapter 3.1) that is directed to emergency professionals as well as the general public. The network provides a wealth of general information on crisis management, but also up-to-date situation assessments and sector-specific warning and communication platforms.

Communication to the general public

According to a Eurobarometer poll for September-October 2009, 27 percent of the respondents felt informed about disaster preparedness and 34 percent about disaster response (European Commission 2009). This reflects a lack of interest among the public as well as of pro-active strategies

¹¹²³ Analysis of Civil Security Systems in Europe, <http://anvil-project.net/>

¹¹²⁴ Further information (in German), e.g. on legal basics and state of play regarding the successive introduction of the system, is available at the BDBOS website http://www.bdbos.bund.de/DE/Digitalfunk_BOS/digitalfunk_bos_node.html.

¹¹²⁵ <https://www.denis.bund.de/>

of civil security agencies. Administrative and political actors at each level of government are responsible for the information of citizens regarding threat levels and impending crises, supported by different emergency services and specialised bureaucracies, such as the BBK. The nation-wide system of alarm sirens, whose main purpose was to warn citizens in the case of war, has been gradually deconstructed since the end of the Cold War. In 2001, Germany instead created the satellite-based system SatWaS to send priority alarm messages to participating news agencies, TV and radio stations as well as to the specialised electronic networks for security authorities (BBK n.d.). The increasingly coordinated, targeted and effective activation of different communication systems should transform SatWaS into MoWaS¹¹²⁶, the modular warning system, which should improve coordination across Germany and use a targeted mix of communication channels to maximise effectiveness (Tiesler 2010).

While large-scale TV and media campaigns are not undertaken, actors in the German civil security system seek to improve their information provision on both preparedness and response management via the internet. The publicly accessible online platform deNIS (see above/ chapter 3.1), offers information on current crises, crisis preparedness and response capacities and behavioural guidelines for concrete emergency situations. In addition, several web-based platforms offer news on water levels and the threat of floods¹¹²⁷ or the risk of forest fires¹¹²⁸. The use of social media (Twitter, Facebook) for both information provision and data collection (e.g. track the outbreak of epidemics) remains very limited.

¹¹²⁶

http://www.bbk.bund.de/DE/AufgabenundAusstattung/Krisenmanagement/WarnungderBevoelkerung/Warnmittel/MoWaS/MoWaS_einstieg.html

¹¹²⁷ <http://www.hochwasserzentralen.de/>

¹¹²⁸ <http://www.dwd.de/waldbrand>

5 Capabilities

5.1 Human resources

The number of relief personnel in Germany is approx. 3 million in total. The voluntary fire brigades account for approx. 1.2 million, medical personnel for 1.2 million, the THW for 80.000, and the Police for 600.000 (expert interview).

Concerning volunteers, non-profit organisations can draw on about 520,000 active volunteers, many of which contribute a substantial number of service hours per week. Volunteer figures or estimates provided by individual organisations are as follows: the German Lifeguard Association (DLRG) has 40,000 active members (DLRG 2011), the German Red Cross (DRK) 401,113 (DRK 2012), the Order of Malta Ambulance Corps (Malteser) 35,000 (Malteser 2012), the St. John Accident Assistance (JUH) 29,738 (Die Johanniter 2012), the Worker's Samaritan Federation (ASB) 12,559 (ASB 2011) and the German Maritime Search and Rescue Service (DGzRS) 800 (DGzRS n.d.)¹¹²⁹ (Hegemann and Bossong 2013).

For education and training of human resources, see chapter 5.3.

5.2 Materiel (non-financial) resources

No specific numbers on material resources are publicly available. The number would be a sum of declarations from several institutions, while official governmental numbers would probably not reflect real numbers, as the latter should be much higher than the expected official numbers resulting from the expenses of the country/states. Since there is a long history of high volunteer involvement in Germany, many local groups of such volunteers often have way more materiel resources at their disposal than financed by the states or country resulting from donations (expert interview).

5.3 Training

Training

The Federal Office of Civil Protection and Disaster Assistance's (BBK) Academy for Crisis Management, Emergency Planning and Civil Protection (AKNZ) in Bad Neuenahr-Ahrweiler is responsible for the training of senior civil protection experts in Germany. It is the only training institution in Germany, which brings together experts up to the political level from all actors involved in national emergency management, i.e. armed forces, intelligence services, the police and civil protection and critical infrastructures. In addition, the AKNZ is involved in the training activities at EU

¹¹²⁹ It needs to be underlined that the accuracy of these estimates is also affected by the fact that many organisational members may be passive or fulfil other social services beyond civil security and emergency management (e.g. regular care and social support for disadvantaged people).

level, inter alia running the "High level Coordination Course" under the EU Civil Protection Mechanism (EC 2014).

The Federal School of the Federal Agency for Technical Relief with its two headquarters situated in Hoya and Neuhausen provides practical and theoretical training for its specialists and executive staff. The school in Neuhausen provides also training at EU as well as at UN level (example: the "Operational Management Course" within the framework of the EU Civil Protection Mechanism).

All states provide training for fire-fighters in their respective schools for fire brigades (in total 19 schools).

Specialists and executive staff of the relief organisations are trained in the respective schools of each relief organisation (ibid.).

Further, AKNZ provides obligatory education for CIMIC personnel of the Armed Forces (MSB 2009), see chapter 3.1.

Exercises

The AKNZ is also in charge of civil protection exercises at national level. A biannual series of National Crisis Management Exercises (LÜKEX) is organised following the "Zivilschutz- und Katastrophenhilfegesetz" law. LÜKEX stands for 'Länder Übergreifende Krisenmanagement-Übung/Exercise' (National Crisis Management Exercise). LÜKEX is structured as a strategic staff framework exercise, i.e. it is not a complete exercise. During the execution phase, up to 3,000 persons from the crisis staff of the core states and other participants (the so-called framework management) are involved in the exercise. Periodical exercises are organised at regional and local levels (EC 2014).

Further information on LÜKEX is available (also in English) in a respective flyer¹¹³⁰ provided on the BBK website (BBK 2013).

Also some of the bilateral agreements as described in chapter 3.1 include joint training and exercises.

5.4 Procurement

5.4.1 Procurement regulation

Basically, the public procurement law („Vergaberecht“) applies. It comprises all regulations and directions that public agencies have to follow when procuring material resources and services needed to fulfil its function. It also includes regulations that define rights of bidders, when procedural rules have been broken in the procurement process.

¹¹³⁰

http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Publikationen/Broschueren_Flyer/Fremsprach_Publikationen/Luekex_englisch-flyer.pdf?__blob=publicationFile

There is not a lot of joint (cross-border) procurement, which is usually also not wanted in Germany. Reason is the principle of subsidiarity that Germany ops for (see also chapter 3.1). Thus, also additional legislation with regard to cross-border procurement is not wanted, as this would increase EU power and decrease MS's power (expert interview).

5.4.2 Procurement procedures

Responsible agency is the Federal Interior Ministry Procurement Office (Beschaffungsamt des Bundesministeriums des Innern), with its different departments. Depending on what is procured, for IT issues the Federal Office for Information Security (BSI) can be involved as well (expert interview).

5.5 Niche capabilities

Niche capabilities of interest to the EU could be available helicopters for disaster response in case of forest fires, C3 (Command, Control & Communication) forces including respective experts, drinking water provision, and the Centre for the coordination of aftercare and for support of victims and their relatives (NOAH) from the BBK (expert interview).

Resources

Legislative acts

Grundgesetz für die Bundesrepublik Deutschland (German Basic Law, 23.05.1949)

Zivilschutzgesetz – ZSG (Civil Defense Act),
http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Gesetzestexte/Zivilschutzgesetz.pdf?__blob=publicationFile (Accessed November 13, 2014).

Gesetz über den Zivilschutz und die Katastrophenhilfe des Bundes (Zivilschutz- und Katastrophenhilfegesetz – ZSKG)
http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/FIS/Zivilschutz-Katastrophenhilfegesetz.pdf?__blob=publicationFile (Accessed November 14, 2014).

Other normative acts

Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, Official Journal of the European Union C 306 (2007): <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2007:306:SOM:EN:HTML>

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http://www.bmi.bund.de/SharedDocs/Downloads/DE/Broschueren/2010/Empfehlungen_Staat_Wirtschaft.pdf;jsessionid=534B379E4A13ED27CA1086A9EF1B20A1.2_cid295?_blob=publicationFile

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Bundesministerium für Bildung und Forschung (2014): Research Programme for Civil Security, <http://www.bmbf.de/en/11773.php> (Accessed November 13, 2014).

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Expert interviews

Federal Office of Civil Protection and Disaster Assistance (BBK), October 2014

Federal Agency for Technical Relief (THW), November 2014



Driving Innovation in Crisis Management for **E**uropean **R**esilience

GREECE

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ATOS (Nadia Politou, Adem Yaşar Mülayim, Alejandro Afonso Spinola, Dario Ruiz)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by FhG-INT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In 2011 Greece's administrative system was drastically overhauled according to the Kallikratis Plan¹¹³¹, a major administrative reform in Greece, introducing 7 decentralised administrations, which group from one to three regions under a government-appointed general secretary. Greece is also divided into 13 regions and 325 municipalities.



Figure 2: Greece's administrative divisions as per Kallikratis plan on 2011¹¹³²

- Decentralized Administration of Attica, with the capital of Athens and the sole region of ■ Attica.
- Decentralized Administration of Macedonia and Thrace, with the capital of Thessaloniki, with the regions of:
 - ■ Central Macedonia
 - ■ Eastern Macedonia and Thrace
- Decentralized Administration of Epirus and Western Macedonia, with the capital of Ioannina, with the regions of:
 - ■ Epirus
 - ■ Western Macedonia
- Decentralized Administration of Thessaly and Central Greece, with the capital of Larissa, with the regions:
 - ■ Central Greece
 - ■ Thessaly
- Decentralized Administration of Peloponnese, Western Greece and the Ionian, with the capital of Patras, with the regions of:
 - ■ Peloponnese
 - ■ Western Greece
 - ■ Ionian Islands
- Decentralized Administration of the Aegean, with the capital of Piraeus, with the regions of:
 - ■ North Aegean
 - ■ South Aegean
- Decentralized Administration of Crete, with the capital of Heraklion and the sole region of ■ Crete.

¹¹³¹ "Kallikratis Plan", last modified on 20 December 2015, https://en.wikipedia.org/wiki/Kallikratis_Plan

¹¹³² "Kallikratis Plan", last modified on 20 December 2015, https://en.wikipedia.org/wiki/Kallikratis_Plan

The list of municipalities per administrative region is available online at [https://en.wikipedia.org/wiki/List_of_municipalities_of_Greece_\(2011\)](https://en.wikipedia.org/wiki/List_of_municipalities_of_Greece_(2011)). The Autonomous Monastic State of Mount Athos is excluded from the Kallikratis Plan.

Civil protection in Greece aims to protect individuals, groups or communities from natural or manmade fast or slow evolution disasters. Disasters can be technological, biological, chemical or nuclear as well as of other type which may occur during peacetime, causing emergency situations. In More specifically in Greece the most typical types of disasters can be earthquakes, landslides/mudslides, forest fires, severe weather phenomena, floods, volcanic eruptions, technological hazards, C.B.R.N. accidents and anthrax incidents. The national civil protection authorities are responsible for the overall coordination of emergencies.

Civil protection in Greece is organised as a co-ordinated resource system whereby national, regional, provincial and local authorities work together with local and public institutions and services. Each of these authorities and institutions has developed its own part of the national civil protection plan (Xenokrates) and makes its own contribution towards achieving the aims of civil protection.

The Greek bodies responsible for the implementation of civil protection measures are:

- The General Secretariat for Civil Protection (GSCP)
- The Inter-Ministerial Committee for National Planning (ICNP)
- The Central Coordination Body for Civil Protection (CCB)
- Several authorities, organisations and institutions working together as an integral part in planning and rescue operations (e.g. the ministries, the fire brigade, the police, the defence forces, health and welfare institutions and aviation and radiation authorities)
- The General Secretariat of the region
- The prefectures
- The municipalities

A number of services are involved in providing disaster relief in Greece:

- The fire corps
- The coast guard
- The police
- The health services
- The armed forces
- The Earthquake Planning and Protection Organisation (EPPO)
- The competent agencies at regional and local levels
- Voluntary organisations with civil protection expertise

Table of Contents

GREECE Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	803
Overview	804
Table of Contents	806
List of Figures	808
List of Tables.....	808
List of Abbreviations.....	809
1 Policy	810
1.1 Risk Assessment.....	810
1.2 Policy and Governance	812
1.2.1 Strategy scope and focus.....	813
1.2.2 Monitoring and analytical support to policy making; R&D	814
1.2.3 Policy for Prevention	815
1.2.4 Policy for Preparedness.....	815
1.2.5 Policy for Response	816
1.2.6 Policy for Relief and Recovery.....	817
1.3 Financing.....	817
1.3.1 Investing in preparedness	818
1.3.2 Investing in consequence management.....	818
1.4 Policy review, Evaluation & Organisational Learning	818
1.4.1 Post-Disaster Assessment.....	818
1.4.2 Departmental Lessons Learned systems	818
1.4.3 Centralised (national) Lessons Learned system	818
1.4.4 International exchange for Lessons Learned.....	819
1.4.5 Regular policy reviews.....	819
1.5 Resilience	819
1.6 Information sharing and data protection	820
2 Legislation	821
2.1 Crisis (emergency, disaster) management concept.....	821
2.2 General crisis (emergency, disaster) management law.....	821
2.3 Emergency rule	822

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	822
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	822
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	823
2.7	Legal regulations for international engagements of first responders and crisis managers	823
3	Organisation.....	824
3.1	Organisational chart.....	824
3.2	Organisational cooperation	826
4	Procedures	829
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	829
4.2	Operations planning	829
4.3	Logistics support in crises	831
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	831
5	Capabilities	833
5.1	Human resources	833
5.2	Materiel (non-financial) resources	835
5.3	Training	835
5.4	Procurement	836
5.4.1	Procurement regulation	836
5.4.2	Procurement procedures	836
5.5	Niche capabilities	837
	Resources	838
	Legislative acts	838
	Other normative acts	838
	Official documents (white papers, strategies, etc.)	838
	Online resources (e.g. websites of key CM organizations)	839
	Publications	839
	Expert interviews	839

List of Figures

<i>Figure 1: Greece's administrative divisions as per Kallikratis plan on 2011</i>	804
<i>Figure 2: Civil Protection Structure in Greece</i>	825

List of Tables

<i>Table 1: Major disasters in Greece</i>	811
<i>Table 2: Responsibility Matrix per disaster in Greece according to "Xenokrates"</i>	834

List of Abbreviations

GSCP	General Secretariat for Civil Protection
ICNP	Inter-Ministerial Committee for National Planning
CCB	Central Coordination Body for Civil Protection
EPPO	Earthquake Planning and Protection Organization
OCCP	Operational Centre for Civil Protection
DRR	Disaster Risk Reduction
HNP-DRR	Hellenic National Platform for Disaster Risk Reduction
UNISDR	The United Nations Office for Disaster Risk Reduction
ECHO	EU Humanitarian Aid and Civil Protection department
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
MIC	Monitoring and Information Centre
CECIS	Common Emergency Communication and Information System
BSEC	Black Sea Economic Cooperation
AI	Adriatic and Ionian Initiative
HE-FRA /J1	Hellenic-French Joint Working Group for Civil Protection
NATO	North Atlantic Treaty Organization
IG	Institute of Geodynamics

1 Policy

1.1 Risk Assessment

In Greece key risks areas of concern are: earthquakes, landslides/mudslides, forest fires, severe weather phenomena, floods, volcanic eruptions, technological hazards, C.B.R.N. accidents and anthrax incidents.

The General Secretariat for Civil Protection (GSCP) is responsible for directing and coordinating all actions related to prevention, control and management of crises. Decision-making responsibilities lie with the General Secretariats of the competent ministries.

Earthquakes are a very common phenomenon in Greece. Greece ranks first in Europe in terms of seismicity and the sixth worldwide. Its geographical position coincides with the area of the planet where big geotectonic phenomena occur such as convergence with the African Euro-Asian lithospheric plate resulting in high seismicity observed in the region.¹¹³³

The first most common disaster in Greece is the forest fires. Forest fire can be caused either by a natural cause, such as thunderbolts, or by human activity (such as burning of garbage, crop residues, etc.). In Greece, the forest fire risk from human activities has been found to be large.¹¹³⁴

Floods are positioned as the second most common natural disaster in Greece. The floods out of natural causes either present a slow evolution or belong to the category of sudden flooding, which is the most common phenomenon in Greece. In the Greek area floods are mostly caused by torrential rains followed by transitions of recessions.

As reported by GSCP in their national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹³⁵, Greece has carried out hazard mapping for major hazards, such as earthquakes, forest fires, floods, industrial hazards, contaminated land and volcanoes:

- Preliminary Flood Risk Assessment has been completed for all River Basin Districts based on historical records and on potential future floods. Areas with Potential Significant Flood Risks have been identified. Since December 2013 Flood Hazard Maps are completed and by December 2015 Flood Risk Maps will be completed. The Institute of Geology and Mineral Exploration carries out physical and environmental vulnerability assessment concerning strong ground motion (e.g. micro zonation studies), landslide susceptibility as well as land and water contamination.
- The Earthquake Planning and Protection Organization provides valid and timely notification to the authorities regarding seismic risk, enabling planning and confrontation. It provides the production/ update of the Greek Seismic Hazard Map.

There are also many finalised and ongoing research and other projects, such as:

- The Hellenic Unified Seismic Network with the Institute of Geodynamics (IG) as coordinator and three University Seismic Networks makes available at IG in near real time waveform data exchange with more than 150 stations.

¹¹³³ Source: Papazachos & Papazachou. 1999. Earthquakes in Greece

¹¹³⁴ Source: GSCP, civilprotection.gr

¹¹³⁵ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

- IG has led or participated in coordinated efforts to produce hazard, vulnerability and risk maps for natural hazards (mainly seismic events) and tsunami generation scenarios. So has the Institute of Environmental Research and Sustainable Development concerning weather-related hazards and adequate monitoring and forecasting.
- The Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing has led or participated in coordinated efforts to produce hazard, vulnerability and risk maps for certain natural hazards, mainly forest fires, heat waves, atmospheric episodes and seismic events.

The following table includes major disasters occurred in Greece in the last 40 years.

Table 7: Major disasters in Greece

Year	Disasters
2014	Earthquakes, Limnos, Aegean Sea, 1 dead
2012	Forest fires, Chios
2009	Forest fires, Attica, lasted 4 days, 21000ha of forests burnt
2008	Earthquakes, Dodecanese, 1 dead
2008	Earthquakes, Peloponnese, 2 dead
2007	Forest fires, mainly affected western and southern Peloponnese as well as southern Euboea, 84 dead, 1500 houses burnt
2006	Flooding, Evros
2003	Floodings, Cyclades
2003	Crack in Nysiros
2002	Floodings, Athens
2002	Tornado in Athens airport
2002	Heavy snow and very low temperatures
2000	Extreme temperature, 2 dead
1999	Oil tanker explosion, Kammena Vourla, 5 dead
1999	Earthquakes, Athens, 143 dead, 700 injured
1997	Forest fires, Seih Sou forest, Thessaloniki, 55% of the forest was burnt
1992	Explosion in oil refining unit, Petrola, 14 dead
1989	Fire in oil refinery, Aspropyrgos
1986	Fire in oil tanks, Kalochori, Thessaloniki
1981	Earthquakes, Gulf of Corinth, 22 dead
1978	Earthquakes, Thessaloniki, 47 dead

1.2 Policy and Governance

The Master Plan with the code name "Xenokrates" has been designed in order to develop an effective system for the protection of life, health and property of citizens and the natural environment against the different disaster phenomena. The "Xenokrates" was compiled by the GSCP with Act 1299/2003 (Government Gazette 423 B / 10.04.2003) and revised by additional Act 3384/2006 (Government Gazette 776 / 28.6.06) approving the Special Plan "Managing human losses."

The "Xenokrates" plan:

- Defines the types of disasters and corresponding protection policy terms.
- Defines roles and provides design guidelines to Ministries, Regions, Prefectures and municipalities.
- Clarifies that all plans should be approved by the GSCP.

The plan also specifies all stakeholders involved and the responsible bodies for the direction and coordination the operational forces at all levels.

Essential elements are provided for risk assessment, labelling vulnerable areas and development of specific plans for each risk. Guidelines are provided for the development of strategies and tactics, good organization and equipment of services and organizational culture configuration. Also guidelines are delivered for early mobilization, motivation, direction and coordination of manpower and resources as well as creating logistical capabilities for troubleshooting both operational forces, and the affected citizens.

The plan foresees the creation of communication and flow of information between all the services involved and factors in crisis management. The plan is a basic design framework, under which the training of specialists at risk projects entrusted to substantive ministries. Already ongoing process of setting up working groups in ministries, on the initiative of the General Secretariat for Civil Protection in order to upgrade their special projects at risk.

The responsible bodies for the implementation of the Master Plan "Xenokrates" for Civil Protection are:

- The Inter-Ministerial Committee for National Civil Protection Planning, composed by the Minister of Interior, Public Administration and Decentralization as President and also the ministers of Finance, Defence, Development, Environment, Physical Planning and Public Works, Health and Welfare, Agriculture, Culture, Transport and Communications, Public Order, Mercantile Marine and the Press and Mass Media.
- The Central Coordinating Body for Civil Protection that is composed by the General Secretary for Civil Protection as President and the General Secretaries of the Ministries of Interior, Public Administration and Decentralization, Economy and Finance, Development, Environment, Planning and Public Works, Health and welfare, Agriculture, Transport and Communication, Public Order, Mercantile Marine, Press and Media, the competent Deputy Hellenic National Defence General Staff and the Presidents of the Hellenic Shipyards and of the Central Unit of Municipalities and Communities of Greece.
- The County Coordinating Body for Civil Protection that is composed by the Prefect as President, and also the President of the Local Union of Municipalities-Communities, the Head of Management of Policy Planning of the Region and the Prefecture, the Military Commander, the Police director, the Director of the Fire Service, the Harbour Master, the

Head of Management of Forests, the Head of Management of Health, the Regional Health System representative, representatives of Voluntary Organizations for Civil protection and where appropriate representatives of the affected regions.

- The Local Coordinating Body for Civil Protection, which is composed by the Mayor as Chairman, two Councillors, Civil Protection Executives of Regions and Prefectures, a Representative of the Military Commander, the Commander of the Police Department, the Head of the Municipal Police, the Commander of the Fire Department, the Head of Technical Services of the Municipalities and local communities of Greece, the Head of Forestry, representatives of Voluntary Organisations for Civil protection and Social Organizations representatives.
- The General Secretariat for Civil Protection which is responsible for the preparation and approval of plans drawn up by the relevant central and regional bodies and utilities, planning, organization and coordination of action on the prevention, preparedness, information and response to natural, technological, and other disasters or emergencies, preparation of resources and instruments for Civil Protection of the country to address the destructive phenomena in the context of the projects per category, the utilization of research plans and information, the coordinating all phases of the project and disaster restoration and editing, designing and monitoring the implementation of civil protection within the government's guidelines.

Within the above mentioned responsible bodies for the implementation of the national plan for Civil Protection are also included all state agencies, departments of local governments and utilities, which are responsible at the operational level for the individual civil protection actions, in particular for preparedness and response to disasters (such as Fire, Coast Guard, Greek Police, National Centre for Emergency Assistance, Armed Forces, Earthquake Planning & Protection services of the Regions, the Prefecture and primary Municipalities and Local Communities of Greece, the Public Power Corporation, the Hellenic Telecommunications Organisation, the Athens Water Supply and Sewerage Company, the Public Natural Gas Supply Corporation and the Hellenic National Meteorological Service).

1.2.1 Strategy scope and focus

Crisis management and disaster response has been given a more important role in Greece after the adoption of the Civil Protection Law 3013/2002 and especially by the introduction of National plans for every disaster and hazard issued by the GSCP. The Greek civil protection system is highly decentralized since each administrative level (Decentralized Administrations, Regions and Municipalities), is tasked to draw its own regional and local plans to ensure resistance against hazards. They include emergency and contingency plans for all kinds of natural and/ or manmade disasters and hazards aiming to build resilience, take appropriate preparedness measures and undertake prevention, preparedness, response and recovery actions. These plans and programs are adopted after extensive and sophisticated cooperation of all competent authorities involved in disaster reduction and disaster management and upon adoption become binding for all stakeholders involved. They are available publicly online on the web portal of GSCP.

1.2.2 Monitoring and analytical support to policy making; R&D

In Greece there is a lot of activity in the research and scientific sector as well as R&D programmes that contribute to the support of risk assessment in policy making as well as disaster risk reduction planning. GSCP holds also the role of coordination and facilitation of cooperation between research academic institutions of the country and public agencies to integrate and use applied research products as well as to promote and coordinate the cooperation between government departments and entities at central, regional and local level with research-academic institutions for this purpose.

As GSCP states in the national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹³⁶ there are various institutions and authorities involved in projects, such as:

- The CivPro “Regional Strategies for Disaster Prevention” project, co-financed by INTERREG IV C and led by the GSCP, is focused on exchanging and sharing know-how on the development of Regional Policies and on a Strategic Approach and Model to prevent and reduce any disaster effects. It was successfully completed in 2012 and established a Model Local/Regional Disaster Prevention Policy Plan, which considerably reduces disaster risk through long-term planned actions.
- The "Greco-Risks" Hellenic Natural-Hazards Risk-Mitigation System of Systems, approved under the Operational Program «Competitiveness and Entrepreneurship» (OPCE II), will deliver a Multi-Risk Geo-intelligent web-Platform integrating Risk Modules for 9 specific hazards: earthquake, volcano, landslide, ground movement, forest fires, flash-floods, extreme weather, tsunami and industrial accidents. GSCP is Lead Partner.
- The Rapid Analysis and Specialization Of Risk (RASOR) project, approved under FP7, will develop a platform to perform multi-hazard risk analysis to support the full cycle of disaster management, including targeted support to critical infrastructure monitoring and climate change impact assessment. GSCP is end user.
- On January 2015 the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing started the programme “TREASURE: Thermal Risk rEDuction Actions and tools for SecURE cities”, financed by the EU Call for proposals 2014 for prevention and preparedness projects in civil protection. It is related to the appraisal and quantification of spatially distributed heat wave risk. It integrates the expertise of epidemiologists, climatologists, Earth Observation scientists and IT developers into intelligent heat wave risk assessments for authorities and personalized tools for citizens in accordance to Hyogo and UNISDR initiatives.
- The Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing has received a large Capacity Building programme, namely BEYOND, Building a Centre of Excellence for Earth Observation based monitoring of Natural Disasters. The programme started in June 2013 and will last for 3 years. New services have been developed during its first half under the three domains (i) Meteorological and/or human induced hazards, (ii) Geophysical hazards and (iii) Atmospheric composition perturbations and air quality degradation. It also increased the total estimated value of its infrastructure by 409,000 euro in the reporting period to attain ground based infrastructure for the acquisition of data relevant to natural disasters in the above areas. In addition, an agreement was signed between the European Space Agency and National Observatory of Athens for the latter to host the Greek mirror site for the acquisition of Sentinel data (Copernicus).

¹¹³⁶ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

Universities and research institutes in Greece focus their research efforts on hazards and some aspects of disaster preparedness and response. They also regularly receive grants under various programs for research related to natural and technological risks.

1.2.3 Policy for Prevention

According to the principal national legislation for civil protection (Law 3013/2002, Ministerial Decree 1299/2003) the basic goals of the civil protection system (protection of life, health and property of citizens from natural and manmade disasters) are met through working out prevention plans and programmes for all kinds of risks (natural and manmade), taking appropriate measures of preparedness and undertaking prevention, preparedness, response and recovery actions. These plans and programmes are elaborated with all the component authorities in national, regional and local level. GSCP collaborates with the competent Ministries and relevant institutions for drafting regulations and specifications to prevent natural, manmade and other disasters, while being responsible for approving all regional and local plans of civil protection, per category of risk.¹¹³⁷

GSCP also issues guidelines for self-protection on its website, which are available, in Greek, English, Spanish, French, Albanian and Arabic. Since 2013, GSCP makes use of social media on a pilot basis including Twitter, Facebook and YouTube.

Furthermore, actions are being pursued at decentralized, regional and local level by competent authorities, such as the Fire Service, the Hellenic Police, the Earthquake Planning and Protection Organization and the Hellenic Coast Guard that make use of social media to communicate information on disasters, in addition to information provided on their websites.¹¹³⁸

In an international perspective, Greece, as a member state of the European Union, takes actively part on a wider policy and strategy planning within the EU for disaster risk reduction, such as the European Civil Protection Mechanism, the Monitoring and Information Centre (MIC) and the Common Emergency Communication and Information System (CECIS).

1.2.4 Policy for Preparedness

Emergency preparedness programs are designed with risk reduction concepts that are incorporated into the “Guidelines for the composition and harmonization of special plans for each disaster at ministerial or central level” as well as according to the “Guidelines for the composition and harmonization of emergency plans by the Regions and Prefectures for each disaster”, both issued by the GSCP.

As reported by GSCP in the national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹³⁹, early warning systems are in place for all major hazards, with outreach to communities. The main authorities involved are:

- The Forest Fire Risk Map Working Team under GSCP. In cases of impending forest fires and according to the Daily Fire Risk Map issued by the GSCP, the whole civil protection

¹¹³⁷ The Hellenic National Platform for Disaster Risk Reduction (HNP-DRR), United Nations Office for Disaster Risk Reduction, Accessed February 2, 2016, <https://www.unisdr.org/partners/countries/grc>.

¹¹³⁸ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

¹¹³⁹ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

mechanism is put in the status of increased preparedness and a series of additional measures are adopted according to the National Plan for Forest Fires.

- Permanent Scientific Assessment Board for Short Term Seismicity Evolution
- National Hellenic Meteorological Service. In cases of increased danger from extreme weather conditions the National Hellenic Meteorological Service and GSCP issue immediate warnings to all competent authorities of civil protection, including communities
- Ministry of Reconstruction of Production, Environment and Energy (air pollution)
- Greek Atomic Energy Commission (nuclear accidents)
- Public Power Corporation (dam failures)
- National Centre for tsunami warnings
- Special Scientific Committee for Santorini Volcano Monitoring under EPPO (Volcanic eruptions).
- "FireHub" is a service platform developed by the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing that consolidates a real time fire detection and monitoring application, a large scale burnt scar mapping during and after wildfires, and a fire smoke dispersion forecasting tool. The service has been qualified in the framework of several EC, Copernicus/ GMES & ESA projects. The platform is online and addresses real decision-makers' needs and has been deployed on an operational basis to several stakeholders. "FireHub" is integrated into the Global Fire Monitoring Center belonging to the International Strategy for Disaster Reduction.
- The Institute of Geodynamics has developed an almost real time seismicity monitoring tool, available to the community. Crustal deformation data are available every day to the scientific community and to the public.

1.2.5 Policy for Response

During a disaster in Greece, there is a central body responsible for all coordination at national level of the civil protection actions and forces in cases the Civil Protection Mechanism is activated in order to respond to an emergency. This body is the Operational Centre for Civil Protection (OCCP) and functions under the GSCP. Furthermore, the OCCP is the national contact point for the European Civil Protection Mechanism and is responsible to post demands for aid on the MIC / CECIS.

In case of a major national disaster the OCCP is gathered under the presidency of the GSCP with presence of all involved General Secretaries to exchange information and decide on further proceedings in order to respond to the emergency and manage the disaster consequences.

At regional level, disaster response is carried out by the competent authorities supported by volunteers and private institutions. All levels of administration and private institutions cooperate to respond, reduce damages and protect citizens' life and property. The interoperability, competences and actions of these authorities are set up in the National Civil Protection Plan "Xenokrates" (Ministerial decision 1299/2003) and further specialized in the National Plans drawn up by GSCP. More specifically, the competent authorities participate at the Coordinative Body of Civil Protection with similar tasks and at local level the competent authorities participate at the Coordinative Local Body. Each level is activated, according to Law 3013/2002, on the basis of the magnitude of each disaster. Each competent authority has its own specialized personnel that can be deployed according to the type of disaster risk, which falls into its scope.

1.2.6 Policy for Relief and Recovery

Disaster recovery is carried out in cooperation of the central level authorities (Ministries) with the regional and local authorities. In principle GSCP, except from the approval of the national planning for the civil protection in Greece, is also responsible for the reporting of the application of the governmental recovery measures after different types of disasters.

GSCP lists in the national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁴⁰ the actions that take place for the post-disaster (seismic, flood, fire, landslides) recovery and reconstruction phase:

- Trained engineers check and evaluate the buildings using the appropriate check sheets
- Damaged areas are integrated into rehabilitation programs
- Temporary settlements are created to shelter homeless population
- The reconstruction and the repairs of damaged buildings is refunded
- Rent fee may be subsidized according to the rehabilitation program
- Regulations are institutionalized in order not only to repair but also to reinforce the damaged buildings and reduce the seismic risk. Construction and seismic regulations for new buildings are improved and rehabilitation and strengthening regulations of existing buildings are developed.

In the disaster recovery phase, the Hellenic Red Cross also works with various institutions and donors to implement recovery projects to support the population of the affected areas by providing psycho-social support and health assistance. After major forest fires measures of erosion control and flood prevention are taken by the Forest Services while during the recovery process of floods, local civil protection authorities (regions, municipalities) take measures for risk reduction of future similar events like reinforcement of river embankments, restoring the normal flow of rivers etc.

1.3 Financing

In the Greek national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁴¹, GSCP states that all administrative levels in Greece, besides central level authorities (Decentralized Administrations, Regions and Municipalities), include a special civil protection unit, either Directorate or Department/ Office, with responsibility for all non-central civil protection matters of its geographical competence. There is a fund specifically allocated by the Ministry of Interior and Administrative Reconstruction (Directorate of Local Government Economic and Development Policy) to the Municipalities for taking up prevention measures against forest fires that also cover risk reduction aspects. This competence of the Ministry is based on a Common Ministerial Decision issued each year which usually also includes criteria and procedures for the allocations. This funding is an institutionalized asset of the Local Government. The allocations are based upon a relevant GSCP proposal, factoring in data, such as fire risk, forest coverage, demographical data, NATURA sites etc. The funding takes the form of grant. Furthermore, according to Law 3013/2002

¹¹⁴⁰ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

¹¹⁴¹ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

the GSCP can propose to the Minister of Interior the allocation of additional funds for prevention and risk reduction measures.

1.3.1 Investing in preparedness

As reported by GSCP in the national progress report on the implementation of the Hyogo Framework for Action (2011-2013)¹¹⁴²¹¹⁴³, disaster risk reduction activities are financed on a project base either by research projects (e.g. European), or by the local authorities and relative bodies. In the second case only the preliminary stages of the study are usually financed.

Moreover, in 2012 the Hellenic National Platform for Disaster Risk Reduction was established. All common initiatives undertaken by the Platform are co-financed by the participating parties and individual activities are financed by the members of the Platform according to policy field. The members of the National Platform will seek additional and differentiated financial resources, giving priority to absorbing funds within the framework of the National Strategic Reference Framework (2007-2013) and the Sectoral Operational Programs that constitute it.

1.3.2 Investing in consequence management

According to the same report, the budget allocated to GSCP from the annual national budget is dedicated to emergency response and immediate disaster relief actions for all natural and man-made disasters and is provided upon request from the competent authorities who are in charge of responding to these emergencies (e.g. Regions, Municipalities etc.). These allocations have been used, for example, for the affected population (temporary housing and sheltering, medical aid, transportation) following an earthquake or a large forest fire.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Part of the responsibilities of GCSP is the review and follow-up of the national policies of civil protection and more specifically prepare review reports on the actions of the responsible bodies as well as provide suggestions for the improvement of those actions.

1.4.2 Departmental Lessons Learned systems

Information on this subject could not be found.

1.4.3 Centralised (national) Lessons Learned system

Information on this subject could not be found.

¹¹⁴² National progress report on the implementation of the Hyogo Framework for Action (2011-2013), General Secretariat for Civil Protection, January 2013

¹¹⁴³ Hyogo Framework for Action (HFA), accessed January 12, 2016, <http://www.preventionweb.net/drr-framework/hyogo/>

1.4.4 International exchange for Lessons Learned

Greece, as a member of the European Union and ECHO, is participating to the European Experts training and exchange programme. The Civil Protection Mechanism's experts exchange system allows for the secondment of civil protection experts to participating states. This exchange of experts provides participants with knowledge and experience on all aspects of emergency intervention and the different approaches of national systems. In Greece, GSCP has the coordinating role of the experts exchange programme.

1.4.5 Regular policy reviews

GSCP has the responsibility of performing regular policy reviews and ensuring the proper execution of the national civil protection policies. GSCP is responsible in ensuring that the connections between the different bodies as well as the cooperating bodies are able and up to which level to accomplish their mission.

1.5 Resilience

As reported by GSCP in the [national progress report on the implementation of the Hyogo Framework for Action \(2013-2015\)](#)¹¹⁴⁴, GSCP has launched a number of campaigns on disaster prevention and preparedness at the citizen and household level:

- Following an official permission by the Ministry of Education, it has also started a programme of secondary school training by experts on self-protection guidelines against natural and technological disasters.
- The National Center for Public Administration and Local Government has been conducting courses on Civil Protection for government employees, also at local/ regional level.
- The Ministry of Education in collaboration with Municipalities runs the course project "Protecting Myself and Others (P.R.O.T.E.K.T.A.)" aiming at providing disaster prevention and preparedness public education and training community emergency response teams. The training includes a cycle of separate but coordinated seminars by different authorities/ organizations.
- The Earthquake Planning and Protection Organization, in cooperation with the Ministry of Education, provide information systematically to the educational community on management of earthquake risk.
- EPPO has made a great effort towards education of different groups on seismic protection issues, such as the public, officials, the school community, volunteers, people with disabilities and tourists. The education procedure includes, depending on the target group, lectures, development of emergency plans and implementation of earthquake drills at schools, seminars, publication of books, handbooks, brochures, leaflets and CD-ROMs. EPPO is carrying out a national project covering all Regions of Greece concerning workshops with staff members of the Local Civil Protection Authorities. The topic is related to the design and prevention - preparedness for emergency management in case of an earthquake.

¹¹⁴⁴ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

1.6 Information sharing and data protection

Information on this subject could not be found.

2 Legislation

GSCP reported in the National progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁴⁵ that the national civil protection legislation was recently updated. According to the report:

Since 2012 the Fire Service was placed under the General Secretariat for Civil Protection and become its main operational branch, while with Law 4249/2014 the core role of GSCP was enhanced. Law 4249/2014 describes the core role of GSCP in coordination and facilitation of cooperation between research-academic institutions and public agencies to integrate and use applied research products in Disaster Risk Reduction planning as well as to promote and coordinate the cooperation between government departments and entities at central, regional and local level with research-academic institutions for this purpose.

2.1 Crisis (emergency, disaster) management concept

National Plans for every disaster and hazard are issued by the GSCP. These National Plans are adopted after extensive and sophisticated cooperation of all competent authorities involved in disaster reduction and disaster management and upon adoption become binding for all stakeholders involved. Law 3013/2002 and the National Civil Protection Plan “Xenokrates” followed by the National Plans for every hazard and disaster form a substantial legal framework of operation in disaster management including disaster reduction aspects.

2.2 General crisis (emergency, disaster) management law

The following laws apply in Greece for crisis management:

1. Ministerial Decision 770/1999, Regulation of Organisation Operations Centre for Civil Protection
2. Law 3013/2002 , Upgrade of Civil Protection
3. Presidential Decree 338/2003, Establishment of Scientific and Research Centre for Civil Protection
4. Ministerial Decision 1299/2003, General Plan on Civil Protection “Xenokrates”
5. Presidential Decree 151/2004, Organisation General Secretariat for Civil Protection
6. Ministerial Decision 3384/2006, Completion of “Xenokrates”
7. Ministerial Decision 7270/2006 on Establishment of Supportive Team for CBRN Management
8. Law 3448/2006, establishment of Teams for the Identification of Victims of Disasters
9. Law 3491/2006, Supportive Team for CBRN Management
10. Law 3516/2007, Issue settings for Civil Protection
11. Law 3613/2007, Issue settings for GSCP
12. Decision 2007 from the EU Council for the Mechanism of Civil Protection (recast)
13. Decision 2007, from the EU Council, Financial Instrument

¹¹⁴⁵ National progress report on the implementation of the Hyogo Framework for Action (2011-2013), General Secretariat for Civil Protection, March 2015

2.3 Emergency rule

The competent body for the declaration of emergency rule for natural or manmade disasters is the General Secretary of GSCP. Emergency rule for civil protection is defined when a specific disaster is involved and for its confrontation is necessary for:

- the GSCP to coordinate all involved stakeholders that take action at a central, decentralised or local level and
- Increased mobilisation of resources and bodies more than the usual under normal conditions.

Emergency rule may be declared by the General Secretary of GSCP or the authorised General Secretaries only in the following cases:

- The suggested proposal needs to be referred to a disaster that derives from one of the categories of disasters that are mentioned in detail in the national civil protection plan "Xenokrates".
- The suggested proposal should list in detail the direct consequences of the disaster together with the reasons for which is deemed necessary the declaration of emergency rule.
- The suggested proposal should state the location according to its administrative name, so that it is easy to identify the correct bodies that should be activated.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The decision of the declaration of emergency rule of an area is associated with the coordination of all stakeholders who are responsible for the immediate confrontation of natural, technological and other disasters as listed in detail in the national civil protection plan "Xenokrates", as well as with the magnitude of mobilisation. In the occasion of low intensity disasters the General Secretary of GSCP can authorise the General Secretary of the decentralised administration, municipality or region for the decisions to be adopted. The declaration of emergency rule of a decentralised administration, municipality or region by its General Secretary can only be done after authorisation by the General Secretary of GSCP.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In the Greek Civil Protection system, every administrative level (decentralised administrations, regions and municipalities) needs to have in place their own regional and local plans for preparedness against hazards. These plans are prepared under the supervision of GSCP.

This fact is a clear evidence that even though local and regional level have some sort of autonomy, the main responsibility lies with the GSCP.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

In addition to what has been described in Section 2.2, the general direction of local initiatives is influenced by international policies and programmes¹¹⁴⁶, especially from the European Union. There is no specific legal framework for volunteers in Greece¹¹⁴⁷. Therefore, volunteering activities are not legally protected. As a consequence, any legal conflict that arise regarding volunteers or the organisations to which they are related to are generally dealt with on a case-by-case basis.

Similarly, NGO's activities respond to the codes of conduct established by the National Agency for Volunteering even though there is no coherent legal framework regulating the status of NGOs. As a result of the code of conduct, 6 principles have been put forward by the Charter of Social Responsibility of the Organisations of Civil Society:

1. The principle of freedom
2. The principle of transparency and accountability
3. The principle of democratic operation
4. The principle of social solidarity
5. The principle of social responsibility and trust
6. The principle of social dialogue and participation

In conclusion, it can be argued that there have been a few steps taken by Greece towards a better regulation in regards to volunteering and NGOs activities. Needless to say, there is still significant room for improvement until a local legal framework can be established.

2.7 Legal regulations for international engagements of first responders and crisis managers

GSCP has the sole responsibility of submitting international assistance requests for Greece according to Article 27, paragraph 2 of Law 3536/2007.

The policy of GSCP in the management of requests either from the Greek Authorities or other states for assistance, with means and human resources, for the confrontation of natural and technological disasters of major scale, concerns the immediate response and coordination between the different stakeholders. The objective is the effective management of international assistance.

The GSCP, through a specialised information system and based on the procedures of the "European Mechanism Activation Policy" (Decision N.121, GSCP), coordinates the process of offering and receiving assistance through international organizations (EU, NATO, Organization of the Black Sea Economic Cooperation (BSEC), etc.) and enabling government agreements.

¹¹⁴⁶ National Report – Greece. Study on Volunteering in the European Union. Council of Europe. 2011

¹¹⁴⁷ Association of Voluntary Service Organisations (AVSO) and the European Volunteer Centre (CEV), Legal Status of Volunteers: Country Report Greece, Brussels, 2003

3 Organisation

3.1 Organisational chart¹¹⁴⁸

The mission of GSCP is to protect the citizen's life, health and property from natural, technological and other major hazards. In addition, it comprises the protection of cultural heritage, historic buildings and monuments, resources and infrastructure. The GSCP studies, plans, organises and coordinates the country's policy concerning issues of public awareness, prevention and confrontation of natural or man-made disasters. It coordinates the actions of the public services and the civil volunteers while ensuring the country's alertness to confront these disasters.

All ministries, regions and prefectures should draw up special plans for the confrontation of disasters based on the national civil protection plan "Xenokrates". The GSCP is the general coordinator of the planning. The Inter-Ministerial Committee for National Planning (ICNP), composed of the heads of the competent ministries, approves the annual national plan for civil protection, including each ministry's civil protection budget. It also reports on the implementation of governmental measures for rehabilitation after major catastrophes.

The Central Coordination Body for Civil Protection (CCB), comprised by the secretaries general of the competent ministries and chaired by the GSCP, presents the civil protection annual national plan and budget for approval by the ICNP. The CCB is responsible for following up and evaluating the annual national planning and for coordinating the response to and recovery and rehabilitation of major catastrophes.

The GSCP and the general secretaries of the regions and the prefects are in charge of coordinating all operational forces depending on whether the disaster is general, regional or local. The National Operational Centre for Civil Protection provides all kinds of assistance to the civil protection forces.

¹¹⁴⁸ Source: <http://extranet.cor.europa.eu/divisionpowers/countries/MembersNLP/Greece/Policy-Areas-Non-Obligatory/Pages/Civil-Protection.aspx>

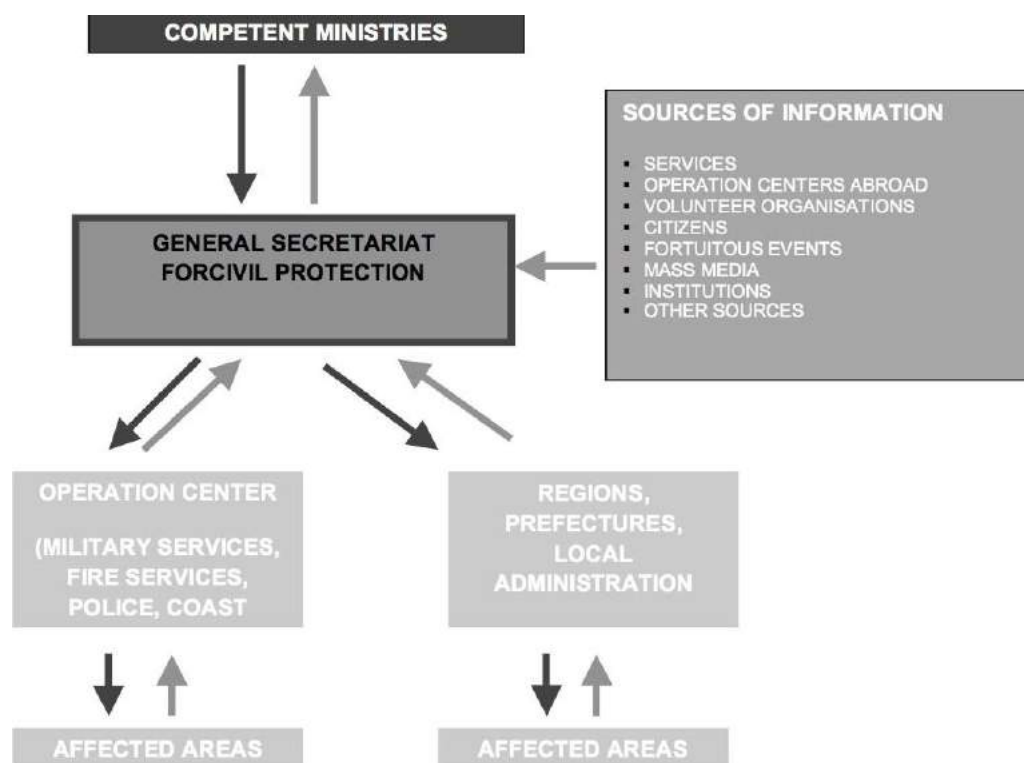


Figure 3: Civil Protection Structure in Greece

Supportive Group for the Management of Chemical, Biological, Radiological and Nuclear Threats and Incidents

According to law 3491/2006, Article 15, there was established an inter-ministerial group within the General Secretariat for Civil Protection, which reports directly to the Civil Protection Secretary and is the Executive Advisory Board, which supports at tactical, operational, and political level the competent forces and organs for civil protection, by providing scientific information and specialized expertise for the management of chemical, biological, radiological and nuclear threats and incidents.

The support team is staffed by higher education officials of appropriate industries, for the confrontation of chemical, biological, radiological and nuclear threats and incidents, from the General Secretariat for Civil Protection, the Ministry of Health and Social Solidarity, the Ministry for the Environment Physical Planning and Public Works, the Ministry of Rural Development and Food, the General Chemical State Laboratory of Greece, the Greek Atomic Energy Commission, the National Meteorological Service and from scientific or suitable trained personnel of the Coast Guard, the Greek Police, the Fire Brigade and the National Defence General Staff. From each operator there are defined four representatives. (Ministerial Decision 7270/2006).

The support group is convened by the Secretary-General for Civil Protection in ordinary and extraordinary meetings. Regular meetings take place within working hours and are for better organization and preparation of the team. The extraordinary meetings relate to the convening of the group for the management of incidents or threatened incidents in which are involved chemical, biological and / or radiological agents. Extraordinary meetings may take place outside working hours and days that are exempt and can be continuous meetings depending on the intensity and extent of the incident that is asked to manage. In case of continuity of the meeting, representatives of organizations involved in the group can be rotated in shifts. The closing of the group is made by the Secretary-General of Civil Protection.

The support group may meet in quorum with the participation of representatives of all agencies or partially depending on the type of threat or incident.

Teams for the Identification of Victims of Disasters

According to article 23 of law 3448/2006, there were created within the General Secretariat for Civil Protection, Teams for the Identification of Victims of Disasters which have the task of recognition and identification of victims of accidents, disasters and criminal and terrorist activities. These teams consist of qualified medical staff, experts and officers of the Greek Police and can be sent to other countries on request and by decision of the Minister of Interior.

3.2 Organisational cooperation

As reported by GSCP in the Greek national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁴⁹:

There is increased cooperation with neighboring and other countries in several fields of risk reduction and disaster management. For example, Greece works closely together with the competent Bulgarian authorities in the field of risk reduction and prevention from river floods in the Bulgarian-Greek borders. As further examples, Greece has ratified the Convention on the transboundary effects of National Progress Report 2011-2013 15/43 industrial accidents with the Law 25446/1997 and EU Floods Directive 2007/60/EC, already incorporated into Greek legislation, establishes transboundary cooperation on a national and international level for floods disaster risk reduction. Several bilateral and multilateral agreements have been signed. Bilateral agreements have been signed and are in force with Cyprus, Turkey, Malta, Russia, Ukraine and USA, or pending ratification (with France, Hungary, Montenegro and Azerbaijan). Others are under preparation. Multilateral agreements include, among others, the Common Declaration on the Operational cooperation within the European Civil Protection Mechanism known now as FIRE 5 (France, Italy, Spain, Portugal, Greece, Cyprus and Belgium), the Organization of the Black Sea Economic Cooperation, the Adriatic and Ionian Initiative, the EUR-OPA Agreement. The European Center on Prevention and Forecasting of Earthquakes operates within the Framework of EUR-OPA. It belongs to the Network of the Specialized Centers of the Agreement and it is based in Athens. The European Center for Forest Fires, also based in Greece, operates within EUROPA belonging to the same Network of the Agreement and is tasked with the research on forest fires issues. The Institute of Geodynamics has a close cooperation with other European Organizations. Since 2010 it has been appointed as the National Tsunami Warning Center. It has strong relations and co-operation with other EU countries and Organizations (North East Atlantic Mediterranean TWS) and recently became Tsunami Watch Provider.

In more detail:

Organization of the Black Sea Economic Cooperation (BSEC)

The BSEC was launched in 1992 as an informal intergovernmental Black Sea Economic Cooperation and transformed into an international financial institution on 1/5/1999, the date on which entered

¹¹⁴⁹ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

into force the Charter of the Organization, which was signed in June 1998 (4-5 / 6 / 1998) in Yalta. The Greece participates as a founding member of the BSEC since 1992.

In BSEC, whose headquarters are in Istanbul, participate twelve countries (Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russian Federation, Serbia, Turkey and Ukraine) whereas nine countries are acting as observers (France, Germany, USA, Israel, Italy, Croatia, Belarus, Poland, Slovakia, Czech Republic and Tunisia).

The Intergovernmental cooperation within the BSEC focuses principally on the areas of organized crime, natural disasters, energy, product transport facilitation and customs formalities, the promotion of SMEs and finally the protection of the marine environment of the Black Sea.

Within the framework of cooperation between the Member States in Civil Protection, the following have been signed:

- Agreement on cooperation in emergency assistance and rapid response to natural and technological disasters among the BSEC countries (15/04/1999, Sochi Russia)
- Additional Protocol to the Agreement on cooperation in emergency assistance and rapid response to natural and technological disasters (20/10/2005, Kyiv Ukraine)

Adriatic and Ionian Initiative (All)

The All was presented by Italy at the European Council in Tampere, during the Finnish Presidency in October 1999 and was endorsed by the EU and Greece. The purpose and areas of cooperation were established in Ancona in 2000 with the participation of coastal Adriatic and Ionian countries.

The Declaration of Ancona identified by two pillars:

- safety and the prevention of crime in the area, and
- the gradual but systematic planned development of the area.

In All participate all Adriatic – Ionian countries (Albania, Bosnia-Herzegovina, Croatia, Greece, Italy, Montenegro, Serbia and Slovenia) who signed the Declaration of Ancona for the "Development and Security in the Adriatic and Ionian" (March 2000).

The meetings of the countries are determined by the presiding country. So far they are roundtable meetings, where all issues are raised for discussion in the order, in the presence of all representatives and country experts.

Hellenic - France Joint Working Group for Civil Protection (HE-FRA /J1)

HE-FRA aims for the time being at enhancing the bilateral cooperation in forest firefighting. The two countries face every summer disastrous forest fires with common characteristics. The recognition of this common threat and the significant experience that has been accumulated in the past years through joint trainings but, mainly, through joint operations in the context of mutual assistance offered, has led the political leaders of the countries to the enhancement of this cooperation.

The results of these official meetings are the following:

On 27/11/2007 a special Memorandum of Mutual Assistance in aerial means (CL – 415) was signed between the two countries to combat forest fires. The two countries have significant experience in matters of mutual assistance in aerial means. The Common Decision, which was taken by the two national authorities on 30/10/2007 and ratified on 27/11/2007 established the Hellenic – France Joint Working Group for Civil Protection; the well-known "HE-FRA/J1". Its mission, composition as well as further operational details are defined in this Decision.

The Common Decision of the two national authorities is the unique to be signed so far in the history of this institution by Greece and France; thus underlining the importance given by the two

governments in this cooperation. HE-FRA/J1 is held under the presidency of a senior official at the GSCP while other officials from Air Force and Fire Service of Greece are also participating.

The common proceeding of HE-FRA/J1 was signed on 13/06/2008 at the GSCP in Athens and SGDSN in Paris. It was accepted as a whole by the Greek and French Civil Protection national authorities as well as of the two national Air Forces and Fire Services.

HE-FRA/J1 also includes exchanges of experts of the Civil Protection Operational Centers of the two countries, joint trainings, exercises with ground and aerial means in Greece and France, as well as the implementation of a special training programme for high – ranking officials of the Fire Service.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The GSCP issues each year circulars about the most common disasters in Greece to all stakeholders indicating the appropriate action that has to be taken and coordinates all involved authorities in order to ensure that all resources are in place in case of a major disaster.

The GSCP organizes training drills and exercises at national/ subnational level where the procedures described in the National Plans are tested in order to assess, analyse and improve them. It also has issued national guidelines concerning the preparation, organization and evaluation of these exercises. For example, the EU POSEIDON 2012 Simulation Exercise project was held in Crete in 2009-2011 and this was the first exercise of the EU Civil Protection Mechanism with a tsunami scenario. Tsunami early warning procedures were tested and lessons learned were identified.

There are search and rescue teams, well trained, for some categories of disasters according to the body they belong, that can be employed by the competent authorities. The Greek State has also stocks of relief supplies stored in depositories in several areas of the country.

Voluntary organizations, registered in the GSCP, are included in planning guidelines and integrated into action plans at local and regional levels. The extensive list of the voluntary organisations can be found on the website of GSCP.¹¹⁵⁰

From a regional perspective, the efforts for the operational setup of a Joint Hellenic-Turkish Standby Disaster Response Unit, consisting of Greek and Turkish experts, should be mentioned. In this context, some disaster preparedness training exercises have already taken place.

4.2 Operations planning

The General Civil Protection Plan “Xenokrates” calls for the development of hazard-specific plans at the local, regional and national levels nationwide. GSCP issues National Plans for every disaster and guidelines to other competent authorities on the methodology of making emergency and contingency plans. Decentralized Administrations, Regions and Municipalities prepare their own emergency and contingency plans and send them to the GSCP for approval.

According to the general guidelines provided by GSCP, each responsible body involved in the design of plans, designs the plans solely based on the mission and the ones defined in the institutional framework governing each body’s operation. All generated plans should involve the four phases for mobilising the civil protection system:

- **Phase 1 - Alertness:** are included all preparatory actions and activities that ensure the conditions for implementation of the approved plans and the operational readiness of the response mechanism, such as maintenance, sourcing (materials, personnel, etc.)

¹¹⁵⁰ Registry of Volunteering Bodies, GSCP, Accessed February 2, 2016, <http://civilprotection.gr/el/%CE%BC%CE%B7%CF%84%CF%81%CF%8E%CE%BF-%CE%B5%CE%B8%CE%B5%CE%BB%CE%BF%CE%BD%CF%84%CE%B9%CE%BA%CF%8E%CE%BD-%CE%BF%CF%81%CE%B3%CE%B1%CE%BD%CF%8E%CF%83%CE%B5%CF%89%CE%BD>

- **Phase 2 - Increased alertness:** all necessary bodies are placed on and alert for the execution of their duties and take, where appropriate any additional precautions. These precautions are associated with the appearance and treatment of the phenomenon and are aimed at reducing the probability of the occurrence of the phenomenon that will cause destruction and / or reduce its consequences (e.g. increased surveillance in forests to ensure timely notification and timely interference).
- **Phase 3 - Addressing (mobilisation – intervention):** during this phase is the actual development of all the necessary resources of the civil protection system for the control and repression (if possible) of the catastrophic phenomenon and particularly the tackling and moderation of the immediate consequences. Where appropriate, citizens are informed about measures for self-protection and also the assistance and facilitation of the work of the forced of the corresponding bodies.
- **Phase 4 – Recovery:** the first damage assessment is made as well as the assessment of the situation and any immediate assistance is provided to those affected (food, shelter, etc.). All actions are implemented for the restoration of the daily operations in the affected area (e.g. traffic restoration, ensuring electricity and water supply, etc.)

And the three levels of government, control and coordination are:

- political – strategic
- operational
- tactical

Except from all the above, plans also include the necessary actions for the safeguard of the operation of the corresponding body in emergency situations as well as the actions for the support of the plan (training, exercises, review)

More importantly, every plan:

- has institutional base;
- is based on sound scientific information and knowledge;
- clearly defines the hierarchical levels of government, control and coordination and the corresponding responsibilities;
- has a system for the collection, evaluation and transfer of information and evaluation of the staff;
- has, if possible, recorded the critical parameters for the implementation of actions and their scalability levels;
- anticipates and clearly describes the actions and the estimated resources necessary in all phases of the mobilization system for the civil protection;
- provides opportunities for making decisions and implementing actions that will be decided during the course of the emergency;
- has a modular structure and gives, if possible, clear guidelines on existing hierarchical levels and regional and local services;
- has been prepared based on interdepartmental cooperation and interoperability

4.3 Logistics support in crises

GSCP issues every year, and according to the period, summer or winter, detailed plans and circulars per subject. With these circulars, all related bodies responsible for each disaster are informed for all actions that should be taken in order to avoid and tackle any types of disasters.

At this moment, GSCP has published on their website detailed circulars for the following subjects among others:

- Civil Protection design and actions to address risks from snow and frost for the period 2014-2015
- Civil Protection design and actions to address risks from the event of floods for the period 2014-2015
- Publication of daily risk forecasting map for the fire season of 2014
- Circular to address risks from major accidents SEVESO facilities
- Civil Protection design and actions to address risks from forest fires for 2014
- Civil Protection design and actions to address risks from seismic phenomena for 2012
- Waste Management (Non-Dangerous, Hazardous and Hazardous Waste Health Units): Institutional framework roles and responsibilities of stakeholders
- Institutional Framework for Air Pollution
- General plan for addressing technological accidents of big volume (SATAME) in 2009
- Drafting of emergency plans per catastrophe of regions and prefectures
- Institutional framework for the quarrying and mining activities, roles and responsibilities
- Institutional framework for air and marine pollution, roles and responsibilities
- Institutional framework for electricity activities, roles and responsibilities
- Institutional Framework for the Activities of Natural Gas, roles and responsibilities
- Institutional framework for monitoring water quality and drinking water, roles and responsibilities
- Map of Forests and woodland areas susceptible to fires

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

According to the nature of each crisis and phenomenon, different approach is taken. GSCP is the central responsible for the communication to the general public and for the publication of alerts and warning, but according to the nature of the phenomenon, there are more bodies involved.

GSCP reports in the Greek national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁵¹ that after each disaster all involved Authorities are responsible to forward all necessary data and reports to the GSCP which then gathers all the information, evaluates it, analyses it and conducts a thorough report of the disaster. In more detail:

- The Earthquake Planning and Protection Organization provides notification to the State Authorities regarding seismic risk.

¹¹⁵¹ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

- The Institute of Geodynamics issues everyday an earthquake (seismicity) catalogue. Greece's seismicity is systematically reported the last 70 years via monthly bulletins. It runs a GPS Network for monitoring the crustal deformation in real time. Data are available to the public and to the scientific community online. IG has developed an almost real time seismicity monitoring tool, available to the communities.
- The Institute of Environmental Research and Sustainable Development has recently completed a systematic database of weather-related hazards over Greece from 2000. In 2006 it started to operate a weather stations network across the country (205 stations in 2012). It operates devices for continuous monitoring of lightning activity over Europe and the Mediterranean.
- The Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing operationally maps the annual burnt area over Greece since 2007 using state-of-the-art technologies and satellite imagery. It's the only reliable technique ensuring assessment of fires damages to forest ecosystems with a high spatial precision at mapping scales from 1:10.000 to 1:50.000 and at short delays (2 months after end of fire season). It operates the Atmospheric Remote Sensing Station, in order to monitor atmospheric conditions over Athens and recognize atmospheric episodes over Greece like Saharan dust intrusions, forest fire smoke dispersion and volcanic ash advection.
- At international level, the competent Greek agencies monitor the flow of information of two international co-ordination centres, NATO's Euro-Atlantic Disaster Response Coordination Centre (EADRCC) and the European Commission's Monitoring and Information Centre (MIC).

5 Capabilities

5.1 Human resources

According to the Master Plan “Xenokrates”, and to the nature of each disaster, there are different responsible bodies. The following table shows the responsibilities of each body according to the nature of the disaster.

Each detailed plan contains a specific section with a detailed description of the human resources (teams and working positions) within all levels where the detailed plan is involved. A complete description on the mission, composition, function and all responsibilities each of the involved persons and groups is provided as well as the sectors, specializations and other special qualifications wherever necessary.

Body		Natural Disasters										Technological	
		Forest Fires	Earthquake	Flood	Extreme weather			Landslides	Volcanic action	CBRN Incidents	Production/distribution units of electricity and gas	Installations with dangerous substances	Major fires in industrial
					Tornados / Gale	Heavy snow / snowstorm / frost	Heatwave						
1	Finance												
2	Interior												
3	National Defense	x	x	x		x				x			
4	Interior, Public Administration and Decentralisation												
5	Development		x		x			x		x	x	x	x
6	Environment Physical Planning and Public Works		x	x	x	x		x	x			x	x
7	Education and Religious Affairs												
8	Labour and Social Affairs												
9	Health and Welfare		x				x			x			
10	Agriculture	x		x		x	x			x			
11	Justice												
12	Culture and Science												
13	Transportation and Communications				x					x			
14	Public Order	x	x	x	x	x		x	x	x	x	x	x
15	Mercantile Marine		x	x	x					x			
16	Press and Media												
17	Macedonia and Thrace												
18	Aegean												
19	Regions and Prefectures	x	x	x	x	x	x	x	x	x	x	x	x

Table 8: Responsibility Matrix per disaster in Greece according to "Xenokrates"¹¹⁵²

¹¹⁵² Emergency Plans – Planning Philosophy and Objectives, Direction of Civil Protection, Decentralised Administration of Macedonia – Thrace, Athanasia Douma

5.2 Materiel (non-financial) resources

Each responsible body for the design of a plan for a specific disaster according to “Xenokrates”, provides within these plans a detailed list of categories of material resources, such as facilities, machinery, vehicles, equipment and other materials that are used for the execution of the plan.

5.3 Training

In the Greek national progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁵³, GSCP reported the following:

The GSCP has launched a number of campaigns on disaster prevention and preparedness at the citizen and household level. It is also the coordinator for the EU Civil Protection Training Mechanism.

The National Centre for Public Administration and Local Government has been conducting two courses on Civil Protection for local government employees. In addition, two courses in disaster and emergency management are offered by the Inter-Balkan Institute for Public Administration; Hellenic Red Cross Instructors are often called to teach classes within these courses.

The Ministry of Education in collaboration with Municipalities runs the course project “Protecting Myself and Others (P.R.O.T.E.K.T.A.)” aiming at providing disaster prevention and preparedness public education and training community emergency response teams. The training includes a cycle of separate but coordinated seminars by different authorities/organizations, such as the GSCP, the Hellenic Red Cross, the Earthquake Planning and Protection Organization and others. At the end of the project the volunteers receive a certificate of attendance.

The Earthquake Planning and Protection Organization (EPPO), in cooperation with the Ministry of Education, provides information systematically to the educational community on management of earthquake risk.

EPPO has made a great effort towards education of different groups on seismic protection issues, such as the public, officials, the school community, volunteers, people with disabilities and tourists. The education procedure includes, depending on the target group, lectures, development of emergency plans and implementation of earthquake drills at schools, seminars, publication of books, handbooks, brochures, leaflets and CD-ROMs.

EPPO is carrying out a national project covering all Regions of Greece concerning workshops with staff members of the Local Civil Protection Authorities. The topic is related to the design and prevention - preparedness for emergency management in case of an earthquake.

The Hellenic Red Cross also provides training programmes to the public, including but not limited to first aid, psychosocial support, and citizen disaster awareness and self-protection.

¹¹⁵³ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), General Secretariat for Civil Protection, March 2015

5.4 Procurement

5.4.1 Procurement regulation

Greece is currently under huge reforms. One of the actions of the reform program in Greece is to modernize public procurement, known concepts and processes in the country. The development of a national strategy on public procurement is part of a broader national policy of the country and a tool to achieve sustainable development policy, social policy, anti-corruption policy in terms of good governance, given that the resources spent on procurement attribute to 10% of the country's GDP.

In this context the Greek State is through an, inter alia, in-depth review of the structures of public administration and the general philosophy of the applicable government policy on public procurement, with a view to sound financial management, the rationalization of public expenditure and administrative practices, the emergence of a transparent and competitive public procurement market as a growth lever of the Greek economy and the implementation of the necessary structural changes.

Member States need to implement directive 2014/24/EU before 18 April 2016. Greece has not yet implemented the directive. Given the complexity of many of the new rules of the directives, and the flexibility offered to the Member States on the means of implementing, Greece identified the need for effective integration which extends, as far as possible beyond the simple repetition of the directives, with consultation and proposals from all stakeholders. The updated plan is available under public open deliberation until 19/02/2016 by the Independent Single Public Procurement Authority on their portal <http://www.opengov.gr/>. The Authority published a detail action plan which envisions the adoption of the directive within February 2016.¹¹⁵⁴

5.4.2 Procurement procedures

As stated in the publication from Zepos & Yannopoulos, Public Procurement – Greece (2012) currently in Greece, four types of procurement procedures exist as follows:

- The open procedure, where any interested economic operator may submit a tender.
- The restricted procedures, any economic operator may request to participate and only candidates invited to do so may submit a tender.
- The negotiated procedure, where the contracting authority consults the economic operators of its choice and negotiates the terms of the contract with them. The negotiated procedures are further divided into procedures with prior publication and procedures without prior publication of a tender notice. In the former case, once the contracting authority has received the requests for participation, it invites the selected candidates (a minimum of three) to negotiate.
- The competitive dialogue. This procedure is used for the assignment of complex contracts. The contracting authority invites the selected candidates to conduct a dialogue until the (technical and/or economic and legal) solutions have been defined. At the end of the dialogue the tenders submit their final offers.

¹¹⁵⁴ Independent Single Public Procurement Authority, Accessed February 4, 2016, <http://www.opengov.gr/aads/?p=5406>

5.5 Niche capabilities

Earthquakes in Greece are a common phenomenon, making it one of the world's most seismically active areas. During the last two years, the Institute of Geodynamics has expanded its monitoring capabilities leading the Hellenic Unified Seismological Network which is operational 24/7. Immediately after an earthquake it informs the GSCP and the Earthquake Planning and Protection Organization. It runs a GPS Network for monitoring the crustal deformation in real time and an extensive Strong Motion Network, with many stations operating in real time.

On the other hand, forest fires are the first most common disaster in Greece. The Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing developed a service platform called "FireHub" that consolidates real time fire detection and monitoring application, a large scale burnt scar mapping during and after wildfires, and a fire smoke dispersion forecasting tool. The service has been qualified in the framework of several EC, Copernicus/ GMES & ESA projects. The platform is online and addresses real decision-makers' needs and has been deployed on an operational basis to several stakeholders. "FireHub" is integrated into the Global Fire Monitoring Center belonging to the International Strategy for Disaster Reduction. It was elected as winner of the Best Service Challenge of Copernicus Masters 2014.

Resources

Legislative acts

1. Act 1299/2003 (Government Gazette 423 B / 10.04.2003) , General Plan on Civil Protection “Xenokrates”¹¹⁵⁵
2. Additional Act 3384/2006 (Government Gazette 776 / 28.6.06) , Completion of “Xenokrates”¹¹⁵⁶
3. Law 3013/2002, Ministerial Decree 1299/2003, Upgrade of Civil Protection¹¹⁵⁷
4. Ministerial Decision 770/1999, Regulation of Organisation Operations Centre for Civil Protection¹¹⁵⁸
5. Presidential Decree 338/2003, Establishment of Scientific and Research Centre for Civil Protection¹¹⁵⁹
6. Presidential Decree 151/2004, Organisation General Secretariat for Civil Protection¹¹⁶⁰
7. Ministerial Decision 7270/2006 on Establishment of Supportive Team for CBRN Management¹¹⁶¹
8. Law 3448/2006, establishment of Teams for the Identification of Victims of Disasters¹¹⁶²
9. Law 3491/2006, Supportive Team for CBRN Management¹¹⁶³

Other normative acts

N/A

Official documents (white papers, strategies, etc.)

1. The National Plan for Civil Protection “Xenokrates”. Presidency of the Government, Athens, Greece, April 2013
2. National progress report on the implementation of the Hyogo Framework for Action (2011-2013), General Secretariat for Civil Protection, January 2013
3. Manual for drafting and harmonisation of special plans per disaster at ministry or other central agency level, Hellenic Ministry of Interior, Public Administration and Decentralisation, General Secretariat for Civil Protection, March 2009

¹¹⁵⁵ http://civilprotection.gr/sites/default/gscp_uploads/ypapofasi12992003xenokrati_el_GR.pdf

¹¹⁵⁶ http://civilprotection.gr/sites/default/gscp_uploads/ypapofasi33842006simplxenokrati_el_GR.pdf

¹¹⁵⁷ http://civilprotection.gr/sites/default/gscp_uploads/nomos30132002anavathmisi_el_GR.pdf

¹¹⁵⁸ http://civilprotection.gr/sites/default/gscp_uploads/YA770_1999OrganosiKEPP_el_GR.pdf

¹¹⁵⁹ http://civilprotection.gr/sites/default/gscp_uploads/pd3382003sistasiepistikentrou_el_GR.pdf

¹¹⁶⁰ http://civilprotection.gr/sites/default/gscp_uploads/pd1512004organismosgpp_el_GR.pdf

¹¹⁶¹ http://civilprotection.gr/sites/default/gscp_uploads/ipapofasi72702006sistasiyodxbrp_el_GR.pdf

¹¹⁶²

http://civilprotection.gr/sites/default/gscp_uploads/nomos34482006sistasiomadonanagnorisisthimaton_el_GR.pdf

¹¹⁶³ http://civilprotection.gr/sites/default/gscp_uploads/nomos34912006yodxbrp_el_GR.pdf

Online resources (e.g. websites of key CM organizations)

- General Secretariat for Civil Protection - <http://civilprotection.gr/>
- Hellenic National Meteorological Service - <http://www.hnms.gr/>
- National Center of Emergency - <http://www.ekab.gr/>
- Hellenic Police - <http://www.hellenicpolice.gr/>
- Hellenic Fire Department - <http://www.fireservice.gr/>
- Hellenic Coast Guard - <http://www.hcg.gr/>
- Institute of Geodynamics - <http://www.gein.noa.gr/>
- Hellenic Red Cross - <http://www.redcross.gr/>
- Volunteers Samaritans - <http://www.samarites.gr/>
- Diavgeia - <https://et.diavgeia.gov.gr/>
- Earthquake Planning and Protection Organisation - <http://www.oasp.gr/>
- European Centre on Prevention and Forecasting of Earthquakes - <http://ecpfe.oasp.gr/en>
- EU Humanitarian Aid and Civil Protection department - http://ec.europa.eu/echo/index_en
- Exchange of Experts in Civil Protection - <http://www.exchangeofexperts.eu/>
- Black Sea Economic Cooperation - <http://www.bsec-organization.org/>
- Adriatic & Ionian Initiative - <http://www.aii-ps.org/>
- Independent Single Public Procurement Authority - <http://www.opengov.gr/>
- Hellenic Seismic Network - <http://bbnet.gein.noa.gr/HL/>
- Earthquake Planning and Protection Organization - <http://www.gein.noa.gr/el/diktua/seismologiko-diktuo>
- Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing - <http://www.astro.noa.gr/>

Publications

- GSCP. Greece - National progress report on the implementation of the Hyogo Framework for Action (2013-2015)
- Papazachos & Papazachou. 1999. Earthquakes in Greece
- Zepos & Yannopoulos. Public Procurement – Greece (2012)

Expert interviews

N/A



Driving Innovation in Crisis Management for **E**uropean **R**esilience

HUNGARY

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Vesselin Petkov, Todor Tagarev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ATOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

- Hungary is a landlocked country in Central Europe with a territory of slightly over 93 thousand square kilometres. It has boundaries, shared with Austria to the west, Serbia, Croatia and Slovenia to the south and southwest, Romania to the southeast, Ukraine to the north-east, and Slovakia to the north. The country is crossed by rivers Danube and Tisza, which are navigable 418 and 444 kilometres, respectively.
- The crisis management system in Hungary has been under significant pressure in the last years, which revealed weakness and vulnerabilities to be addressed through policies and actions. Numerous disasters – from the notorious red sludge spill, via floods, to storms and droughts – made it evident that a profound reform of the Hungarian crisis management and disaster response architecture was needed.
- A new disaster management law was adopted in 2011 (in force since 1 January 2012), laying the foundations of a system in which professional disaster management service cooperates closely with obliged and volunteer civil protection structures. As put by the law, disaster management has been named a national cause.



Figure 4: The Logo of the NDGDM.

- The National Directorate General for Disaster Management (NDGDM) within the Ministry of Interior is the national authority for disaster management. As of 1 January 2012 a new organisational structure of the NDGDM was introduced, which has been built on three pillars: civil protection, fire protection and industrial safety, with the National Inspectorate General of Fire Services, the National Inspectorate General of Civil Protection and the National Inspectorate General of Industrial Safety constructing the backbone of the NDGDM.
- The Disaster Management Governmental Coordination Committee (DMGCC) is an inter-agency coordination body ensuring consistency between sectors. At county and local level, protection committees are in place to concert disaster management.
- From an operational perspective, the central structures for disaster management at the county and local level include 20 county directorates for disaster management, their subordinated offices for disaster management, the professional fire departments and the municipal fire departments.

Table of Contents

H U N G A R Y Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	840
Overview.....	841
Table of Contents	842
List of Figures	844
List of Tables.....	844
List of Abbreviations.....	844
1 Policy	846
1.1 Risk Assessment.....	846
1.2 Policy and Governance	851
1.2.1 Strategy scope and focus.....	851
1.2.2 Monitoring and analytical support to policy making; R&D	851
1.2.3 Policy for Prevention	852
1.2.4 Policy for Preparedness.....	853
1.2.5 Policy for Response	854
1.2.6 Policy for Relief and Recovery	854
1.3 Financing	854
1.3.1 Investing in preparedness	854
1.3.2 Investing in consequence management.....	854
1.4 Policy review, Evaluation & Organisational Learning	855
1.4.1 Post-Disaster Assessment.....	855
1.4.2 Departmental Lessons Learned systems	856
1.4.3 Centralised (national) Lessons Learned system	856
1.4.4 International exchange for Lessons Learned.....	856
1.4.5 Regular policy reviews.....	856
1.5 Resilience	857
1.6 Information sharing and data protection	857
2 Legislation	858
2.1 Crisis (emergency, disaster) management concept.....	858
2.2 General crisis (emergency, disaster) management law	858
2.3 Emergency rule	859

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	859
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	859
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	859
2.7	Legal regulations for international engagements of first responders and crisis managers	860
3	Organisation	861
3.1	Organisational chart.....	861
3.2	Organisational cooperation	864
4	Procedures	865
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	865
4.2	Operations planning.....	867
4.3	Logistics support in crises	867
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	868
5	Capabilities	869
5.1	Human resources	869
5.2	Materiel (non-financial) resources	869
5.3	Training	869
5.4	Procurement	870
5.4.1	Procurement regulation	870
5.4.2	Procurement procedures	872
5.5	Niche capabilities	872
	Resources	873
	Legislative acts	873
	Other normative acts	873
	Official documents (white papers, strategies, etc.)	873
	Online resources (e.g. websites of key CM organizations)	873
	Publications	874
	Expert interviews	874

List of Figures

<i>Figure 1: The Logo of the NDGDM.</i>	841
<i>Figure 2: Risk Mapping of Hungary.</i>	848
<i>Figure 3 . EU Solidarity Fund Activations.</i>	855

List of Tables

<i>Table 1: Classification of Risks.</i>	847
<i>Table 2: The most affecting (in terms of financial damage) disasters in Hungary for the period 1900 – 2014. .</i>	849
<i>Table 3: The most affecting (in terms of people killed) disasters in Hungary for the period 1900 – 2014.</i>	849
<i>Table 4: Summarised table of natural disasters in Hungary between 1900 and 2014.</i>	850
<i>Table 5: Levels of Hungarian Crisis Management System.</i>	863

List of Abbreviations

CEPC	Civil Emergency Planning Committee
CMDR	Hungarian crisis management and disaster response
CPG	Civil Protection Group
CTIF	International Association of Fire and Rescue Service
DMGCC	Disaster Management Governmental Coordination Committee
DPPI SEE	Disaster Preparedness and Prevention Initiative for South-Eastern Europe
DREF	Disaster Relief Emergency Fund
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EU ERCC	Emergency Response Coordination Centre
EU MIC	EU Monitoring and Information Centre
FEU	Federation of the European Union Fire Officer Associations
GCCR	Governmental Coordination Centre for Reconstruction (GCCR)
HFA	Hyogo Framework for Action
HUNOR	Hungarian National Organisation for Rescue Services
IDC	International Development Cooperation
INCA	Integrated Nowcasting System for the Central European Area
INSARAG	International Search and Rescue Advisory Group
JHA	Justice and Home Affairs

JRC	[EU] Joint Research Centre
MoLaRi	Monitoring and Public Alarm System
NDGDM	National Directorate General for Disaster Management
OCHA	UN Office for Coordination of Humanitarian Affairs
OMSZ	Hungarian Meteorological Service
PECO	Pays d'Europe Centrale et Orientale
PPA	Public Procurement Act
RSOE	National Association of Radio Distress-Signalling and Infocommunications
TIC	Territorial information Centre
UNECE	United Nations Economic Commission for Europe

1 Policy

The crisis management system in Hungary has been under significant pressure in the last years, which revealed weakness and vulnerabilities to be addressed through policies and actions. Numerous disasters – from the notorious red sludge spill, via floods, to storms and droughts – made it evident that a profound reform of the Hungarian crisis management and disaster response (CMDR) architecture was needed.

A new disaster management law was adopted in 2011 (in force since 1 January 2012), which put greater emphasis on “prevention and preparation, and on a more intensive cooperation with the population, on self-reliance, and on taking responsibility”¹¹⁶⁴, laying the foundations of a system in which professional disaster management service cooperates closely with obliged and volunteer civil protection structures. As put by the law, disaster management has been named a national cause.

In the period January-June 2011, when Hungary presided over the Council of the European Union, disaster management was specifically included in the Justice and Home Affairs part of its programme, stressing the need of enhanced cooperation between Member States in the field, and drawing attention to flood management and risk assessment activities, in order to improve the protection of European citizens.¹¹⁶⁵ The Hungarian programme (quoting the example of the Gulf of Mexico spill in 2010) also stressed the need for action in relation to the safety aspects of offshore oil and gas exploration licensing, operation, inspection and the revision of overall responsibility. The document recalled that the European Commission had presented a Communication on “Facing the challenge of the safety of offshore oil and gas operations.” In this respect, the Hungarian Presidency aimed to have the first exchange of views on the European Commission’s legislative proposal on the safety of offshore oil and gas activities.

As part of the EU Hungary is also supporting the implementation of the Hyogo Framework for Action and relevant disaster risk reduction initiatives including through the development of a national disaster risk reduction platform, involving actors from the development, humanitarian, planning, environment, agriculture and civil protection side.

1.1 Risk Assessment

In February 2009 the European Commission adopted the Communication on a Community approach to reducing the impact of natural and man-made disasters within the EU. Further, in November 2009 Council Conclusions on a Community Framework on Disaster Prevention within the EU, adopted during the Swedish Presidency, underlined the importance of the national and international elements of disaster prevention policies, such as hazard and risk identification and assessment, impact analysis, risk mapping and regular review.

In April 2011, during the Hungarian EU presidency, the Justice and Home Affairs configuration of the Council adopted Conclusions, issued under number 8068/11, on “Further Developing Risk Assess-

¹¹⁶⁴ Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf.

¹¹⁶⁵ *Strong Europe with a Human Touch*, The Programme of the Hungarian Presidency of the Council of the European Union, http://www.eu2011.hu/files/bveu/documents/HU_PRES_STRONG_EUROPE_EN_3.pdf.

ment for Disaster Management within the European Union.” The Conclusions invite the member states to initiate national risk assessments by the end of 2011, by structuring the process and setting the methodological framework, organising coordination between stakeholders, identifying and analysing single-risk scenarios, consider multi-risk scenarios, etc.¹¹⁶⁶

In Hungary, as a first step in the process of implementing the requirements of the Council, the main risks have been identified, namely “floods and inland waters, earthquakes, forest fires, industrial accidents, extreme weather phenomena and man-made disasters.”¹¹⁶⁷ Second, to carry risk assessment relevant actors and were involved in a national conference (divided into working groups), organised in June 2011. The final document from the conference concluded that “the availability of or the differences in the data did not allow a detailed analysis in each case” and called to “the European Commission to support a more accurate risk assessment, preferably by inviting international calls for proposals.”¹¹⁶⁸

Although the above-mentioned document does not qualify as a comprehensive national risk assessment, there exists partial risk assessment for Hungary, as part of national or international projects.

In 2007 the Joint Research Centre's Institute for the Protection and Security of the Citizen published a report on “Risk Mapping in the New Member States,” a result of research carried within the 5th and 6th Framework Programmes, aimed, among others, at examining the existing situation in the 10 PECO (standing for Pays d'Europe Centrale et Orientale; French for Countries of Central and Eastern Europe) countries for mapping of eight priority natural (floods, forest fires, storms, earthquakes, landslides) and technological hazards (industrial installations, transport of dangerous goods and contaminated lands).¹¹⁶⁹

From a methodological point of view, the JRC project relates “high risk” with a hazard that is present within the vast majority of the country (more than 2/3 of it) or, alternatively, when the hazard is confined only to particular areas but in case of an accident, the effect could be significant for at least one major population centre or an important economic resource.

Table 9: Classification of Risks.

Type of risk	Territory	Population/resource affected
High risk	HR>2/3	Major population centre
Medium risk	1/3<MR<2/3	Minor population centre
Low risk	LR<1/3	No population centre affected

For Hungary, qualitative analysis by national experts classified the eight hazards as follows:

¹¹⁶⁶ Council conclusions on Further Developing Risk Assessment for Disaster Management within the European Union, <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208068%202011%20INIT>.

¹¹⁶⁷ National Risk Assessment, Synopsis, available at: [http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.\[1\].doc](http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.[1].doc).

¹¹⁶⁸ National Risk Assessment, Synopsis.

¹¹⁶⁹ Risk Mapping in the New Member States, JRC Scientific and Technical Reports, available at: http://www.preventionweb.net/files/5455_JRC38184.pdf.

Countries	Floods	Indust. Install.	Transport of Dang. Goods	Forest Fires	Contaminated Lands	Storms	Earthquakes	Landslides
Romania								
Bulgaria								
Czech Republic								
Poland								
Hungary								
Slovenia								
Slovakia								
Latvia							n/a	n/a
Estonia								
Lithuania								
Cyprus								

Legend

	HIGH
	MEDIUM
	LOW
n/a	NOT APPLICABLE

Figure 5: Risk Mapping of Hungary.

- Carrying low risk relevance – storm, earthquakes, landslides
- Medium risk relevance – industrial installations, forest fires, contaminated lands
- High risk relevance – floods, transport of dangerous goods

It is also worth noting that in a related report ¹¹⁷⁰ on flood risk mapping, no less than six examples involving Hungary were quoted to show how increased number of floods in eastern and central Europe, had been affecting life of citizens on a large scale, namely:

- July 1997 in Poland, the Czech Republic, Slovakia and Hungary;
- November 1998 in Hungary and Slovenia;
- March-April, July 1999 in Hungary and Romania;
- April-May 2000 in Hungary and Romania;
- March 2001 in Hungary and Romania, June-July 2001 in Poland;
- April and August 2002 in Romania, Hungary, the Czech Republic and Slovakia

Floods

¹¹⁷⁰ “Risk Mapping of Flood Hazards in the New Member States,” JRC Scientific and Technical Reports, available at: http://eusoils.jrc.ec.europa.eu/Esdb_Archive/eusoils_docs/other/EUR22902EN.pdf.

As evident from statistical data tabled below, floods have affected the largest number of people in Hungary and together with droughts have been most damaging to the country's economy.

Table 10: The most affecting (in terms of financial damage) disasters in Hungary for the period 1900 – 2014.

Disaster	Date	Damage (000 US\$)
Drought	Jun-86	500000
Flood	15/05/2010	440000
Drought	May-92	384000
Flood	21/02/1999	165000
Flood	9/7/1999	128400
Drought	Jul-03	100000
Flood	1/5/1970	85000
Flood	6/4/2000	55000
Flood	14/08/2005	48000
Flood	7/8/2002	30000

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels – Belgium

Table 11: The most affecting (in terms of people killed) disasters in Hungary for the period 1900 – 2014.

Disaster	Date	No Killed
Extreme temperature	Jul-07	500
Flood	1/5/1970	300
Extreme temperature	Dec-01	81
Extreme temperature	27/12/2005	48
Storm	Feb-99	40
Extreme temperature	Jan-08	17
Extreme temperature	Feb-12	16
Flood	9/7/1999	8
Storm	1/2/2003	7
Storm	20/08/2006	5

In Hungary, there are two any legal instruments that mandate or guide official mapping of flood hazards, namely Act LXXIV of 1999 and Act LVII of 1995. Hungarian authorities produce national maps for floodplain inundation areas of 1/100 and 1/1000-year frequency. Most of the maps are in paper, and some are digital. National, regional and provincial maps were created in 1977 and have not yet been updated, while the municipal were produced in 1984 and were updated in 2002. Notably, Hungary is among the PECO countries that indicated that flood hazard maps tended to contain detailed information related to flooding potential, particularly on high scale maps.

Table 12: Summarised table of natural disasters in Hungary between 1900 and 2014.

		# of Events	Killed	Total Affected	Damage (000 US\$)
Drought	Drought	3	-	-	984000
	ave. per event		-	-	328000
Earthquake (seismic activity)	Earthquake (ground shaking)	1	-	1800	-
	ave. per event		-	1800	-
Extreme temperature	Cold wave	3	114	500	-
	ave. per event		38	166.7	-
	Extreme winter conditions	1	48	-	-
	ave. per event		48	-	-
	Heat wave	1	500	-	-
	ave. per event		500	-	-
Flood	Unspecified	3	300	200	85000
	ave. per event		100	66.7	28333.3
	General flood	12	10	229883	881400
	ave. per event		0.8	19156.9	73450
Storm	Unspecified	2	9	300	10000
	ave. per event		4.5	150	5000
	Local storm	4	51	14000	-
	ave. per event		12.8	3500	-

Flood hazard data collected by Hungary includes:

- Surface water hydrometry – water level, discharge, water quality;
- Ground water hydrometry – depth, discharge, quality;
- Climatology & Meteorology – precipitation, temperature, pressure, solar radiation, evapo-transpiration;
- Soil – soil moisture deficit, permeability.

Earthquakes

Statistical studies show that four to five 2.5–3.5 magnitude earthquakes can be expected every year in Hungary, which can be felt near the epicentre, but cause no damage. Earthquakes causing light damages occur every 15–20 years, while stronger, more damaging 5.5–6 magnitude quakes happen about every 40–50 years.¹¹⁷¹ Only one earthquake in 2014 was with a magnitude of >4, thus coded orange.

¹¹⁷¹ Seismological Observatory of the Hungarian Academy of Sciences, www.seismology.hu/index.php/en/.

The Seismological Observatory of the Hungarian Academy of Sciences produces earthquake hazard maps, as well as regular earthquake bulletins.

Risk Maps

For risk mapping purposes, Hungary maintains DTA 50 and DDM 200 maps – with topic layers with information on vulnerabilities, hazard sources, etc. The maps allow searches, operations with coordinates, graphic-based selections.

1.2 Policy and Governance

Before the year 2000, the two pillars of the Hungarian disaster management were the firefighting and the civil protection organisations, carrying out disaster response and crisis management tasks. The merger into a National Directorate General for Disaster Management was regulated by the provisions of Act LXXIV of 1999 on the management and organisation of disaster protection and the prevention of major accidents involving hazardous substances. The law was aimed at providing a comprehensive framework for the activities of the central and local authorities, operating at different levels, with tasks and responsibilities in the prevention and control of disasters and in eliminating the consequences thereof.

However, disasters of the past decade exposed some deficiencies of the crisis management system. Taking these into account, a new Disaster Management Law was adopted, which came into force on 1 January 2012. The Law and related amendments; the Defence Law of 2011; and the government decree on the establishment, organisation and operation of the coordination committee for disaster management currently form the legal basis of Hungary's crisis management.

1.2.1 Strategy scope and focus

The acts listed define responsibilities “relatively well.”¹¹⁷² The changes of 2011-2012 concern the subordination of municipal firefighting to disaster management authorities, the improvement of the connection between local government and disaster management professionals, stricter control over volunteer firefighter organisations. In addition to that, an enlarged group of industrial plants and dangerous material transport belong under the supervision of disaster management authorities.¹¹⁷³

1.2.2 Monitoring and analytical support to policy making; R&D

R&D support to policy making is provided within the framework of several EU-funded projects.

SEERISK

The National Directorate General for Disaster Management (NDGDM) of Hungary is the lead partner in a project, called SEERISK, together with 19 project partners (local and regional municipalities, meteorological institutions, disaster management organisations, universities) from Hungary, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia, Slovakia and Slovenia. SEERISK is aimed at improving the consistency of risk assessment legislation and practices used by the project partner

¹¹⁷² Viktoria Takacs and Piotr Matczak, “Country Study: Hungary,” Analysis of Civil Security Systems in Europe, http://anvil-project.net/wp-content/uploads/2013/12/Hungary_v1.0.pdf.

¹¹⁷³ Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf.

countries at national and local level, especially in case of disasters intensified and/or triggered by climate change in the Danube macro-region.

The project started in July 2012 and first collected and processed risk-related information from the partner countries. Then, project partners produced a Common Risk Assessment Methodology to help create risk maps taking into account various risk factors. A GIS Best Practices Questionnaire was also developed which aims to look at the geographic information systems software, hardware and human resource penetration in the countries.

DRAVIS

The National Association of Radio Distress-Signalling and Infocommunications (RSOE) as lead partner, the Somogy County Disaster Management Directorate, the Baranya County Disaster Management Directorate, the Zala County Disaster Management Directorate, Koprivničko-križevačka County and Osječko-Barajska County are involved in a project for enhancement and geographical extension of cross-border joint planning in Hungarian-Croatian disaster management cooperation.

DRAVIS project is implemented in the frame of the „Hungarian-Croatian IPA Cross Border Cooperation Programme 2007-2013,” to improve disaster management in River Drava region. The project provides help for developing GIS and for the implementation of joint exercises for the involved Hungarian and Croatian disaster management organisations. Furthermore a web-interface information exchange system was developed, which can be used to request assistance from neighbouring disaster management organisations in case of emergency.

INCA

In the period 2011-2013 Hungary's meteorological service OMS and the Somogy County Disaster Management Directorate were part of the INCA-CE (INCA Central Europe - Integrated nowcasting system for the Central European area, <http://www.inca-ce.eu/index.php>) project, aimed at creating a common tool that allows more precise weather warnings; a transnational web-based dissemination system conveying the weather information and warnings to authorities and the public; a more efficient interface between warning data providers (weather services) and their applications and users. The project also evaluated strengths and weaknesses of current methods in natural disaster warning and risk prevention by making it easier for both public and private users to incorporate meteorological risk assessments into their planning. Project partners were from Austria, Czech Republic, Germany, Hungary, Slovakia, Poland, Italy and Slovenia.

1.2.3 Policy for Prevention

The NDGDM operates an Industrial Safety Information System which collects and stores detailed data on more than 730 dangerous plants. The system includes “data about license requests, safety analysis and safety reports, external emergency plans and other public information submitted by operators of dangerous plants.” The system contains all the information required for carrying out regular inspections and prevention tasks.

According to their activity, the plants subject to the Disaster Management Law are divided into the following categories: gas industry (87); storage of fertilizers (56); oil industry (44); power- and heating plants (31); deposits and logistics centres (63); general chemical industry (51); manufacture of medicines (13); manufacture and storage of plant-health products (48); explosives and ammunition; pyrotechnics (15); plastics industry (35); dangerous waste (23); produce and consumption of biofuel

(9), food industry (95), building industry (19), agriculture (90), heavy industry (35), waterworks, bath, swimming pool (28) and other dangerous plants (27).

The NDGDM of Hungary registers and analyses the emergency incidents involving dangerous substances and major accidents occurring in Hungary, and in accordance with the provisions of the Seveso II Directive forwards report to the MARS (Major Accident Reporting System), renamed eMARS (<https://emars.jrc.ec.europa.eu/?id=4>).

1.2.4 Policy for Preparedness

Preparedness in Hungary's crisis management system relies on early warning systems with outreach to communities, namely:

Territorial information Centre (TIC)

TIC operates a database and a GIS system in order to manage emergencies, supporting the interventions of the municipal fire brigades. In addition to that, in the Baranya County, an sms notification system was established to alert all mayors in the county at the same time, in case of emergency. Public media have also been included in order to immediately inform the population by issuing public notices in case of emergency.

Monitoring and Public Alarm System (MoLaRi)

In order to reduce risks related to disasters, in 2006 Hungarian authorities launched the MoLaRi project as a human-centred early warning system for prevention and rapid emergency response. The project focuses on major industrial accidents in the surroundings of hazardous industrial plants, where operational accidents would endanger the inhabitants.¹¹⁷⁴ In the period 2006-2013, 80 chemical and meteorological, 280 chemical monitoring stations and 565 alarms have been set up around 20 hazardous industrial plants in 9 counties in order to ensure public awareness. The system carries out continuous monitoring and measuring in the surroundings of hazardous industrial plants perceiving the concentration of poisonous and explodable gases. The data is forwarded automatically via a national centre to the 24 / 7 duty services of the disaster management directorates and relevant local fire-brigades. In case a critical level is reached, the system launches electronic alarming and information mechanisms to inform the population immediately. MoLaRi was set to TETRA standard in 2010.

Early warning system for the prevention of nuclear accidents

The system is operational since 2009 and its main activities include early warning of the whole country in case of nuclear accidents, international radiological monitoring and data exchange. There is continuous contact with national and neighboring countries' radiological data exchange centres. The system includes Radiological Telemetry Stations and their IT background.

Storm-signal systems at the lakes Balaton and Velencei (BVR) and Information and Emergency Response Systems at Lake Balaton, Tizsa River (TISR) and Danube River (DISR) are also in operation.¹¹⁷⁵

¹¹⁷⁴ Hungary: National Progress Report on the Implementation of the Hyogo Framework for Action (2009-2011) – Interim, available at http://www.preventionweb.net/files/31275_hun_NationalHFAprogress_2011-13.pdf.

¹¹⁷⁵ Hungary: National Report 2009-2011 of Hungary on the Progress on the Implementation of the Hyogo Framework for Action, available at http://www.preventionweb.net/files/27580_hyogo20082011tisza.pdf.

1.2.5 Policy for Response

The national emergency number for fire-fighting (105) has been linked to the regional Operations Management Duty Services, where experienced fire fighters receive the calls and alert manpower and assets, according to the type of the incident. They direct them to the site in the shortest possible time, taking into consideration technical and economical requirements.¹¹⁷⁶

1.2.6 Policy for Relief and Recovery

The Red Sludge case study in section 4.1 provides some information on the policy for relief and recovery “in action”.

1.3 Financing

1.3.1 Investing in preparedness

According to the National progress report on the implementation of the Hyogo Framework for Action (2013-2015)¹¹⁷⁷, substantial resources were invested in the development of the volunteer fire service. Accordingly, the support in 2012 amounted to 120 million Ft, in 2013 – to 220 million Ft and in 2014 – to 300 million Ft. This made it possible to supply and operate special technical equipment and tools, to restore vehicles and their equipment, to provide training, as well as communication equipment.

1.3.2 Investing in consequence management

The Hungarian government operates a vis major fund (i.e. money allocated from the central budget) that is activated upon a government decision. After the red sludge spill in 2010, the Government covered the affected municipalities' extra expenditures and the cost of the reconstruction of municipal properties with money from the fund. Thus Devecser received a grant of over HUF 1,6 bln., Kolontar – of almost HUF 50 mln., Somlovasarhely – of over HUF 270 mln. and Tuskevar – of HUF 242 000. The three former municipalities also received subsidies amounting to a total of HUF 503.707 mln.¹¹⁷⁸

In addition to that, a government decision of 04 November 2010 on the mitigation of damages of the spill, on financing the reconstruction and rehabilitation and on the mitigation of further damages to non-residential buildings was adopted, classifying the area designated for construction as an investment area with the intention to build new houses to replace the destroyed ones.

A total of 120 new houses were built in Devecser and Kolontar. Besides that, 127 used properties were purchased for over HUF 1.2 bln., while 117 victims of the disaster received cash compensations. The government also covered so-called “green damage” (livestock, gardens, unharvested crops, etc.),

¹¹⁷⁶ Website of National Directorate General for Disaster Management.

¹¹⁷⁷ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), http://www.preventionweb.net/files/43038_HUN_NationalHFAprogress_2013-15.pdf.

¹¹⁷⁸ National Directorate General for Disaster Management, Red Sludge – Hungary 2010, http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/red_sludge_2010_eng.pdf.


damage caused to clothing and food deposits, motor vehicles, furniture amounting to over HUF 320 mln.

According to experts, the private insurance option is unpopular among many people who prefer the solidarity of national compensation.

International aid

Created as a reaction to the heavy floods in Central Europe in the summer of 2002, European Union's Solidarity Fund is aimed at responding to major natural disasters and express Europe's solidarity to region suffering the consequences of disasters. Since then, it has been activated on 60 occasions, including floods, forest fires, earthquakes, storms and drought in 23 European countries. As of September 2014, the Fund has provided funding of over Euro 3.6 bln. Hungary has received a total of EUR 37.6 mln of aid for the floods in April 2006 and in May 2010.

Figure 6 . EU Solidarity Fund Activations.

	April 2006	Floods	major	519	15.1	37.6
	May 2010	Floods	major	719	22.5	

Another source of funding, supporting Hungary's efforts for disaster recovery is the Disaster Relief Emergency Fund (DREF) of the International Federation of Red Cross and Red Crescent (IFRC).

Recently, in March 2013 CHF 178,068 was allocated from DREF to support the Hungarian Red Cross Society with the replenishment of their own emergency stocks, already distributed to some 15,000 beneficiaries after unexpected and belated severe winter weather in March paralysed almost half of Hungary for several days.¹¹⁷⁹

Back in the 2001-2002 Hungary received CHF 50 000 from the DREF after an appeal related to heavy floods resulting in a record-rise of the levels of river Tisza and its tributaries rose. In addition to that, Hungary received CHF 165,752.47 (in cash) and CHF 215.859 (in kind).¹¹⁸⁰

Over the last years several governments (Austria, Czech Republic, Germany, Slovakia, Switzerland) have also provided support (cash or in-kind), based on bilateral agreements with Hungary for managing the consequences of various disasters.¹¹⁸¹

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

In the last years, post-disaster assessment has been high on the agenda of Hungary's Commissioner for Fundamental Rights (i.e. the Hungarian Ombudsman). After the red sludge spill in October 2010, the Commissioner launched a complex assessment of the state's tasks related to disaster manage-

¹¹⁷⁹ DREF Operation Update, Hungary: Extreme winter conditions (2013), <http://reliefweb.int/sites/reliefweb.int/files/resources/Extreme%20winter%20conditions%20-%20DREF%20operation%20no%20MDR%20HU001%20Update%20no%201.pdf>.

¹¹⁸⁰ DREF Operation Update, Hungary, Romania, Ukraine: Floods (2003), <http://reliefweb.int/sites/reliefweb.int/files/resources/1054ED87F4BA87BD85256CAA0066E519-ifrc-hun-08jan.pdf>.

¹¹⁸¹ Authors' processing of information by UNOCHA (<http://fts.unocha.org/>).

ment and an examination from a fundamental rights protection perspective the cooperation of state organs in the event of disasters.

The findings of the examination were included in the Annual Report of the institution of 2011. In the Report, the Commissioner recommended that the relevant legal base needed revision, pointing out that “legislation relating to the prevention and management of disasters should, as far as possible, be unified, simplified and their number should be reduced.”¹¹⁸²

Further, the report noted in disaster management regulations “one should as far as possible avoid a parallel regulation of identical subjects or regulations relating to the same subject which are different or contrary to each other.” The report indicated that a very complex management mechanism was in place, regulated by a multitude of acts. Further, the report called for “regular and real training” for the mayors and their specialised staff in order to be able to perform their tasks in full.

The report also went back to the deaths resulting from the severe storms (case discussed in detail below, in section 4.1) in August 2006 and stressed that in case of a disaster “informing the public was and is a legal obligation of the disaster management organs, therefore such information must be given in a professional way and using such terminology which is in line with the terminology used in weather reports. Citizens can only adequately cooperate in the prevention and management of situations of danger or of disasters if they are aware of the given threat. For this purpose we need appropriate information material which gives comprehensible information to the public.”¹¹⁸³

1.4.2 Departmental Lessons Learned systems

No specific information could be obtained.

1.4.3 Centralised (national) Lessons Learned system

No specific information could be obtained.

1.4.4 International exchange for Lessons Learned

Section 3.2 delivers more detailed information as to the international cooperation maintained by Hungary’s NDGDM in various formats, which is also pertinent to the exchange of lessons learned.

1.4.5 Regular policy reviews

Within the framework of or with the support of international organisations (UN, EU) studies and reports have been produced on aspects of the Hungarian disaster management policy, organisation and practice. Two examples are listed below:

The ANVIL project, funded by FP7, provided an assessment of the Hungarian crisis management capacity from the point of view of ‘civil security’, focusing on three criteria: legitimacy, effectiveness, and efficiency. The project has produced ‘key findings’ but did not draw policy recommendations.

¹¹⁸² Report on the Activities of the Parliamentary Commissioner for Civil Rights in the Year 2011, available at http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu_=http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F.

¹¹⁸³ Report on the Activities of the Parliamentary Commissioner for Civil Rights in the Year 2011, available at http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu_=http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F.

For their part, the national progress reports on the implementation of the Hyogo Framework for Action (HFA) contain self-declared strategic goals, to be achieved over a two-year period, and a self-assessment on the progress made over the two years, preceding the moment of reporting.

1.5 Resilience

Hungary has set three strategic goals in the context of the implementation of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters:

- The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.
- The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.
- The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

1.6 Information sharing and data protection

No specific information could be obtained.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The “Security threats and challenges for Hungary and their management” part of the Hungarian National Security Strategy says in art. 33 that “due to its geographical characteristics, Hungary is particularly exposed to the effects of environmental and civilisation hazards emanating from the countries bordering the Carpathian Basin, to floods and water and air pollution. The environmental sources of danger also have an indirect effect on the health of the population.”¹¹⁸⁴ Art. 34 notes that “Uncontrollable processes in certain industrial, biological, chemical and especially nuclear facilities may jeopardise or cause damage to the health of masses of people, as well as to the environment, the security of life or property. Further risks are posed by the transportation of hazardous goods by land and rail, on waterways, in the air or through pipelines.”

As regards the ways and means to implement the strategy in its part concerning crisis management, art. 50 states: “Hungary must increase capabilities at its disposal with a view to allowing the operation of a complex prevention system ensuring a quick, effective and well-organised response to natural or industrial disasters in order to protect the life and essential property of the population, and to minimise consequences. Special attention must be paid so that such a response interferes as little as possible in the life of the population and the activities of the productive units in the course of reacting to events. To this end, organisations concerned need to be in possession of tools required for command, control and implementation, both domestically and internationally. In line with international processes and requirements, special attention must be paid also to the usability of internal crisis management capabilities abroad, and to the optimisation of capability development on site.”

2.2 General crisis (emergency, disaster) management law

The general act regulating the field of disaster management was adopted by the Hungarian Parliament in September 2011, entering into force on January 1st, 2012. The disaster management law stipulates the tasks of various ministries and the composition of the Disaster Management Governmental Coordination Committee (DMGCC), i.e. the state level of Hungary's disaster management system. The Act further defines the role of the county and local protection committees, operating at the regional and local level, respectively. The professional disaster management authorities operate under the supervision of the Minister of Interior. These include the National Directorate General for Disaster Management, county directorates for disaster management, local branches and disaster management posts.

In practice, the Act and Hungary's Fundamental Law (relevant provisions are discussed below) updated the rules pertaining to prevention and preparedness, enabling “effective extraordinary measures in case of disasters and emergencies and establishing a uniform disaster management system.”

¹¹⁸⁴ Hungary's National Security Strategy, available at <http://2010-2014.kormany.hu/download/4/32/b0000/National%20Security%20Strategy.pdf>.

2.3 Emergency rule

In terms of emergency rule, the Hungarian Fundamental Law ¹¹⁸⁵ of 2011 distinguishes between four extraordinary states of legal order – of national crisis, of emergency, of preventive defence, and of danger.

According to the Fundamental Law, the Parliament declares a state of national crisis and establishes the National Defence Council in the event of a state of war or an imminent danger of armed attack by a foreign power. The state of emergency is declared “in the event of armed acts aimed at the overturning of the constitutional order or at the exclusive acquisition of power, and of serious mass acts of violence threatening life and property, committed with arms or in an armed manner.” State of preventive defence is activated “in the event of a danger of external armed attack or in order to meet an obligation arising from an alliance.” The state of danger is declared by the Government in the event of “any natural disaster or industrial accident endangering life or property, or to mitigate the consequences.”

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

A list of legal acts that pertain to the roles of agencies and departments in disaster management:

- Act XXXI of 1996 on the protection against fire and technical rescue work and the fire service
- Act CXVI. of 1996 on the peaceful use of nuclear energy
- Act CV of 2004 on the Hungarian Defence Forces and National Defence ¹¹⁸⁶

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

No specific information was obtained.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

There exist a number of instructions that regulate the involvement of volunteers in disaster management. An exhaustive list could be obtained from the website of the NDGDM. ¹¹⁸⁷

¹¹⁸⁵ The Fundamental Law of Hungary, available at <http://www.kormany.hu/download/e/02/00000/The%20New%20Fundamental%20Law%20of%20Hungary.pdf>.

¹¹⁸⁶ A comprehensive list in Hungarian is available at: http://www.katasztrofavedelem.hu/index2.php?pageid=hatosagi_kozerdeku.

¹¹⁸⁷ Available at http://www.katasztrofavedelem.hu/index2.php?pageid=szervezet_jogszabaly.

2.7 Legal regulations for international engagements of first responders and crisis managers

Hungary (through NDGDM) maintains bilateral relations with 17 countries (Austria, Azerbaijan, the Czech Republic, Greece, Croatia, Poland, Latvia, Lithuania, Macedonia, Germany, Russia, Romania, Serbia, Slovakia, Slovenia, Turkey, Ukraine and Mongolia) based on government agreements for disaster management.

The organisation puts special emphasis on enhancing cooperation with neighbouring countries and on the development of operational work. A framework agreement with each of Hungary's seven neighbouring countries for cooperation in disaster management is in place. Close cooperation is based on the fact that there are cross-border disasters, eradication of these joint efforts of the countries concerned in that we need. This is true for prevention activities, as well as disaster relief.

Within the framework of the Central European Initiative, in 1996 Hungary was among the parties signed Cooperation Agreement¹¹⁸⁸ on the Forecast, Prevention and Mitigation of Natural and Technological Disasters, together with five more countries, aimed at:

- exchange of scientific and technical information and relevant data on a regular basis;
- implementation of common research programmes;
- training of experts in the field of forecast, prevention and relief, in order to set up common programmes on Civil Protection and Disaster Management

Several EU documents and pieces of legislation apply to crisis management at EU and member state level.

- Treaty establishing a Constitution for Europe;
- COM (2010) 673: Objective 5: Increase Europe's resilience to crises and disasters - Action 2: An allhazards approach to threat and risk assessment
- Directive 2007/60/WE of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risk;
- Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection;
- Council Directive 82/501/EEC of 24 June 1982 on the major-accident hazards of certain industrial activities (Seveso);
- Council Directive 96/82/EC of 9 December 1996 on the control of major accident hazards (Seveso II);
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

It is also a signatory of the Convention on the Transboundary Effects of Industrial Accidents.

¹¹⁸⁸ Available at http://www.biicl.org/files/4299_cei_cooperation_agreement.pdf.

3 Organisation

3.1 Organisational chart

The National Directorate General for Disaster Management (NDGDM) within the Ministry of Interior is the national authority for disaster management.

As of 1 January 2012 a new organisational structure of the NDGDM was introduced,¹¹⁸⁹ which has been built on three pillars: civil protection, fire protection and industrial safety, with the National Inspectorate General of Fire Services, the National Inspectorate General of Civil Protection and the National Inspectorate General of Industrial Safety constructing the backbone of the NDGDM.

The main tasks of the National Inspectorate General of Fire Services include prevention activities, firefighting, coordination of tasks related to firefighting and technical rescue activities during emergencies and disasters; providing guidance for unified implementation of activities related to fire protection; etc.

The National Inspectorate General of Fire Services carries out the tasks pertaining to the field of fire protection in cooperation with the citizens, partner organizations, business and voluntary organisations and, last but not least, with industrial and local governmental fire brigades and fire associations.

The activities of the National Inspectorate General for Industrial Safety, which is responsible for tasks related to industrial safety, include four main functions: the supervision of hazardous plants, the control of the transportation of dangerous goods, the protection of critical infrastructures, and averting nuclear accidents.

The NDGDM has 20 county directorates (for the 19 counties and for the capital, Budapest), namely:

1. Baranya County Directorate for Disaster Management
2. Bács Kiskun County Directorate for Disaster Management
3. Békés County Directorate for Disaster Management
4. Borsod Abaúj Zemplén County Directorate for Disaster Management
5. Csongrád County Directorate for Disaster Management
6. Fejér County Directorate for Disaster Management
7. Győr Moson Sopron County Directorate for Disaster Management
8. Hajdú Bihar County Directorate for Disaster Management
9. Heves County Directorate for Disaster Management
10. Jász Nagykun Szolnok County Directorate for Disaster Management
11. Directorate for Disaster Management of the Capital
12. Komárom–Esztergom County Directorate for Disaster Management
13. Nógrád County Directorate for Disaster Management
14. Pest County Directorate for Disaster Management

¹¹⁸⁹ Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf.

15. Somogy County Directorate for Disaster Management
16. Szabolcs Szatmár Bereg County Directorate for Disaster Management
17. Tolna County Directorate for Disaster Management
18. Vas County Directorate for Disaster Management
19. Veszprém County Directorate for Disaster Management
20. Zala County Directorate for Disaster Management

The operational disaster management structures at the county level include¹¹⁹⁰:

- 65 Branch Offices for Disaster Management;
 - 46 Disaster Management Offices;
 - 65 Disaster Management Guards;
- 105 Professional Fire Departments;
 - 60 Local Government Fire Brigades;
 - 72 Industrial Fire Brigades;
 - 564 Volunteer Fire Associations.

As regards civil protection units, there are 47 central civil protection organisations with 452 of personnel subordinated to the NDGDM. According to information as of 2012, the non-professional, volunteer and obliged civil protection organisations include civil protection organisations of settlements (20609) and civil protection organisations at the workplace (1011).¹¹⁹¹

An important part of the Hungarian crisis management system is the professional rescue team with specialised equipment that has been established under the auspices of the NDGDM, called HUNOR (Hungarian National Organisation for Rescue Services), which can also operate abroad, when needed. HUNOR is tasked with the search for and rescue of victims trapped under ruins, and with the provision of first aid, if necessary. In areas affected by earthquakes its tasks include technical rescue, removing victims and ensuring their chances for survival. All of the professional firefighters who have applied for the rescue service have several years' experience in technical rescue and four or five special qualifications.

In addition, the HUSZOR medium urban search and rescue team has been created with the involvement of voluntary rescue services with national qualifications and of the local organisations of civil protection.

The two teams were certified as meeting the respective UN INSARAG Guidelines in 2012 on the basis of a 36-hrs field exercise.

Disaster Management Governmental Coordination Committee

The Disaster Management Governmental Coordination Committee (DMGCC) is an inter-agency coordination body ensuring consistency between sectors. Its chair is the Prime Minister of Hungary, while its members are the relevant ministers. The meetings are attended by the directors of the law en-

¹¹⁹⁰ Website of the National Directorate General for Disaster Management, in Hungarian, http://www.katasztrofavedelem.hu/index2.php?pageid=szervezet_szervezeti_abra.

¹¹⁹¹ Ministry of Interior of Hungary, National Directorate General for Disaster Management, http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf.

forcement agencies, the Chief of the Defence Staff and the heads of relevant national authorities. DMGCC is the Government's decision support organisation. The DMGCC operates the National Emergency Management Centre, which coordinates operational tasks, collects the necessary information, evaluates and analyses them together with leadership of the professional disaster management body, involving experts from the ministries.

Protection committees

At county and local level, protection committees are in charge of decision making for crisis preparedness and response. Protection committees are under central coordination; the members are stakeholders (local authorities, representatives of disaster management bodies, etc). As of 1 January 2012, the county protection committees are chaired by the county government commissioner, while one of their vice-chairs is the county disaster management director, while the other is a representative of the Ministry of Defence. The chairs of the local (municipal) protection committees are the heads of the government's district offices.

Table 13: Levels of Hungarian Crisis Management System.

	State Level	County Level	Local Level
Coordination	Disaster Management Governmental Coordination Committee	County Protection Committee	Municipal Protection Committee
Management	DGDM	County Directorate of NDGDM	
Operational element		Professional Fire Departments	Municipal Fire Departments

Disaster Response Platform

Another consequence of the reorganisation of the Hungarian crisis management system was the establishment of Hungarian National Platform for Disaster Reduction in 2001. The Hungarian platform is now working under the NDGDM and is presided by the Director General of NDGDM. The members of the platform include:

1. Government organisations: ministries
2. Non-governmental organizations
2. Scientific institutions
3. Media
4. Private sector organisations
5. Private companies

The aim of the platform, comprising over 30 members who meet once a year, is to discuss their contribution and efforts taken in the field and to come up with new ideas to reduce disaster risks. NDGDM updates the platform members' on the current international DRR themes and upcoming events. Additionally, certain members of the platform also belong to the governmental coordination committee described above and the Humanitarian Assistance Coordination working group of the Ministry of Foreign Affairs.

3.2 Organisational cooperation

NDGDM is actively engaged in international activities within EU, NATO and UN.

NDGDM represents Hungary in the Civil Protection Workgroup of the Council (PROCIV) and other relevant task forces, and acts as the official national contact point for the Emergency Response Coordination Centre (previously EU Monitoring and Information Centre (MIC) – the body responsible for tasks related to providing and requesting international assistance.

In Hungary NDGDM also coordinates civil emergency planning (CEP) activities, and participates in the meetings of the NATO Civil Emergency Planning Committee (CEPC) and in the work of the Civil Protection Group (CPG). Furthermore, the NDGDM is the national contact point for NATO's Euro-Atlantic Disaster Response Coordination Centre (EADRCC).

NDGDM serves as the national contact point for the UN OCHA.

Last but not least, the NDGDM is involved in formats such as the Disaster Preparedness and Prevention Initiative for South-Eastern Europe (DPPI SEE); the disaster management cooperation in V4; the International Association of Fire and Rescue Services (CTIF); and the Federation of the European Union Fire Officer Associations (FEU).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The Red Sludge Accident

Hungary's most severe test to disaster response procedures was an industrial accident that occurred on 4 October 2010, when a corner of the dam of one of the reservoirs collapsed on site at the Ajka Alumina plant (operated by Hungary's MAL). As a result, almost one million cubic meters of red sludge and alkaline water were freed and flooded the lower parts of the settlements of Kolontar, Devecser and Somlovasarhely. Ten people were killed during and after the sludge flow, almost 300 persons were hospitalised. The total number of people affected by the accident was over 700. More than a thousand hectares of arable land were contaminated.

A waste product of alumina (form of aluminium oxide) production, the red sludge was measured to have a very high pH (11-14), which was responsible for severe chemical burns to humans and animals and killing specimens in the rivers and in the contaminated soils.

After several alerts by the local population the police alarmed the Ajka Professional Fire Brigade. Two trucks and nine fire fighters were sent on site. After due reconnaissance was carried, the chief fire officer alerted the rest of the personnel. In the first phase of the reconnaissance, the fire-fighters had no information on the composition of the red material, which resulted in 17 rescuers, fire-fighters, policemen, soldiers receiving burns and respiratory damages. As the regular fire-fighting equipment was not suitable to cope with such an incident, the rescuers had to use civilian earthmoving machines, bulldozers. At a later stage, all fire and rescue forces available in the county, including volunteer fire brigades, fire-fighting associations, special rescuers, joined their efforts to rescue the population in Kolontar (60 persons) and Devecser (over 700 persons).

Acting on basis of the Constitution and the Act on Civil Protection of 1996, the Hungarian Government declared emergency for three counties – Veszprem, Győr-Moson-Sopron and Vas, effective as of 1500 hrs, 06 October 2010. An Onsite Operational Staff was established to manage the process of mitigating the consequences of the accident, involving civil protection, fire fighting, police, and military units, and volunteers.

Onsite tasks focused on the cleanup of built-in areas, decontamination of outer areas, and on the elimination of damage to living waters.

The Police organised checkpoints to regulate the traffic. On 9 October partial evacuation was ordered for the Kolontar (40 people) and Devecser (500 people). Lodging was provided to affected people, staying at the settlements, by the municipalities and charity organizations provided lodging.

On 6 October the following services and equipment were on site at Kolontar and Devecser.

Service	Staff	Equipment
Fire Service	84	12 vehicles
4 Emergency Detection Teams (EDT)	12	
Police	103	22 vehicles

Military	174	39 vehicles
Civil Protection	29	20 vehicles
Civilians	149	43 machines
National Medical Service	5	2 vehicles
MAL	50	
Total	606 persons	142 units of equipment

By 20 October the number of people and equipment involved in mitigation activities reached 1,125 and 292, respectively. In November, a total of 8,535 persons and 4,881 units of equipment took part in the relief and recovery efforts, with an average of 400 to 500 persons and 70 units of equipment involved on a daily basis.

In the meantime, NDGDM issued daily reports to EU Member States through the EU Monitoring and Information Centre. Additionally, the NDGDM requested, through EU MIC, experts with relevant experience to consult the process of mitigating the environmental damage. On 9 October the EU MIC sent a liaison officer to Hungary and on 11 October, a five-member team consisting of Belgian, German, Swedish, French and Austrian expert arrived onsite. A Swiss environmental expert from the UN Environment Program, exchanging information with the team, and experts from UN World Health Organisation, making assessments in Devecser, concerning the health status of the population, were also involved in the recovery phase.

After the end of its mission, the EU team issued both short- and long-term recommendations. On 18 October European Commissioner for International Cooperation, Humanitarian Aid and Crisis Response, Kristalina Georgieva also visited the site.

On 4 November a Governmental Coordination Centre for Reconstruction (GCCR) was established from the professional disaster management personnel. The GCCR managed the decontamination, rehabilitation and reconstruction tasks. The state of emergency was lifted and the GCCR disbanded on 1 July 2011.

Storms in Budapest

A severe hit Budapest on 20 August 2006, causing havoc during the celebrations of the National Holiday. Around 1.2 million citizens attending fireworks display were hit by storm and hail shortly after the display started at 21:00 local time. Torrential rain and winds of over 120 km/h tore down trees, smashed cars and windows and ripped tiles off rooftops. Five people died and hundreds were injured as a result of the storm.

The Hungarian Meteorological Service (OMSZ) had issued the forecast about the storm on its publicly available web-based warning system, with a red code. Additionally, on the day of the tragical event the service had sent several warnings to the disaster management authorities¹¹⁹². The main reasons for the tragic event to happen, as concluded by an inquiry of the Commissioner for Fundamental

¹¹⁹² Marta Sallai, "The Tragical Story of the August 20,2006," Website of the World Meteorological Organisation, <https://www.wmo.int/pages/prog/drr/events/Pula/Presentations/MHEWSHungary.pdf>.

Rights, were serious legal deficiencies pertaining to the communication among the responsible parties and the responsibility for taking preventive measures.¹¹⁹³

In its report, the Commissioner asked “asked the Minister heading the Office of the Prime Minister, the Minister of Local Government and Regional Development and the Minister of Justice and Law Enforcement to make the necessary arrangements to redress the disclosed improprieties” and issued several recommendations:

- for a legal regulation of the OMSZ,
- for reconsideration by the Assembly of Budapest Capital of the rules defining the tasks and operation of the Budapest protection committee
- for issuing by the Minister of Local Government and Regional Development of a ministerial decree on detailed rules of the national disaster management regulations.¹¹⁹⁴

In practical terms, the following changes have been made in the Hungarian crisis management system:

- As of October 2006, the OMSZ has been a member of the operational staff, responsible for organising national celebrations, so the staff receive first-hand meteorological information. Since 20 August 2006 the meteorological support is a compulsory part of the management plan for every state-organised event;
- For its part, the OMSZ refined the criteria for issuing warnings, in order to avoid confusion. Code “red” is now only issued in the case of the most dangerous, rarely occurring weather events. The web-based system of the service was updated, and an alarm page has been established, accessible to everyone from the front page of met.hu.¹¹⁹⁵

As a result from the improvements, on 20 August 2007, albeit in different weather conditions, a storm of similar intensity hit Budapest during the National Day celebrations. OMSZ had already forecasted the storm in the morning hours. The hundreds of thousands of people who took part in the events (air parade, cultural programs, religious procession etc.) were informed of the weather conditions through screens and loud speakers. As a result of the concerted efforts of the authorities, nobody was hurt during the 2007 storm.

4.2 Operations planning

Information could not be obtained.

4.3 Logistics support in crises

Information could not be obtained.

1193 Annual Report on the Activities of the Parliamentary Commissioner and the Deputy Commissioner for
Civil Rights in 2006, <http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#48> INSTANCE zBJ6X6dsEcyu =[http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolo en%2F%3F](http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolo%20en%2F%3F)

1194 Annual Report on the Activities of the Parliamentary Commissioner and the Deputy Commissioner for Civil Rights in 2006, [http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv# 48](http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#48) INSTANCE zBJ6X6dsEcyu =[http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok en%2F%3F](http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F).

1195 <http://www.met.hu/idojaras/veszelyjelzes/riasztas/index.php>. See also Marta Sallai, "The Tragical
Story of the August 20, 2006," Website of the World Meteorological Organisation."

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The “Red Sludge” accident represents an example of how crisis communication is carried out in Hungary.

Before and during the evacuation, the communication with the people from affected settlements was carried through public information materials, including rules of conduct, the contents of the emergency package, notification of disabled persons, rules of self-evacuation, route of evacuation and reception points. A total of five evacuation zones were designated, comprising about 200 residential buildings and one or two streets per zone, between 25 and 65 residential buildings per zone.¹¹⁹⁶

In the meantime, due to movement restrictions in the affected areas and the state of emergency, communication was centralised. Furthermore, spokespersons were appointed to help the work of media and guide media representatives to the reservoir, the evacuation sites, etc. in a controlled manner. The Hungarian authorities were extremely cautious when providing information about the disaster for fear of loss of credibility, economic paralysis and potential diplomacy issues with neighbouring countries.¹¹⁹⁷

¹¹⁹⁶ National Directorate General for Disaster Management, Red Sludge – Hungary 2010.

¹¹⁹⁷ National Directorate General for Disaster Management, Red Sludge – Hungary 2010.

5 Capabilities

5.1 Human resources

Volunteer associations

The Hungarian volunteer law, Act LXXXVIII of 2005¹¹⁹⁸ on voluntary activities in the public interest, defines "volunteer activities with a public aim" as work carried out within a host organisation without compensation. In article 4, the law also specifies that any person with legal capacity above the age of ten can become a volunteer.

According to data by the Hungarian Statistical Office, in 2010 there were nearly 65,000 registered non-profit organisations. Among those, 1.4% declared to have civil protection and fire protection related activity, 3.75% - public safety related activity, while 5,749 were charity organisations.

Since 2012 the involvement of volunteer rescue services in crisis management operations is only possible if the organisations meet certain requirements, which is verified by means of certification exercises. If the volunteer services passed the "exam," they could take part in different type of rescue activities in cooperation with the NDGDM for 5 years.

Private business

Private business is involved in crisis management activities in a number of ways. For example, the training for the fire protection exam is done by private companies. The registration of training organisers and examinations is coordinated by the disaster management directorates at the county level. Also, under the SEVESO directive the industrial plants have an obligation to prepare internal security plans, risk assessments and special reports in case of accidents. Similarly, critical infrastructure security analysis is required. Those activities could be performed by registered experts / companies. Among the members of accredited rescue teams can be private companies with specific expertise.

5.2 Materiel (non-financial) resources

An example for outsourcing some of the logistic activities is the agreement with the association of transportation companies. The Association of Hungarian Forwarding and Logistic Services signed an agreement with NDGDM on outsourcing some logistic tasks for private logistic companies. The agreement contains certain tasks like transportation preparedness, storage of sand bags, and provision of rescue staff for flood protection. As a result, the overall costs of preparedness will be smaller, and the capacity of NDGDM can be used more efficiently.

5.3 Training

Disaster Management Education Centre

¹¹⁹⁸ Act LXXXVIII of 2005 on voluntary activities in the public interest www.civil.info.hu/uploaded/documents/onkentes/1212746798vol_act_pub_int_2005_hu.pdf.

Since year 2000, a Disaster Management Education Centre has been operational in Hungary, which focuses on professional training for disaster management, fire and civil protection, and industrial safety outside the school system as defined in the laws on vocational and adult education. This institution is also a national examination centre. The training is supported by taking advantages of opportunities provided by tenders, international relations, professional events and exercises. The staff and the students may be involved in operations in case of major disasters as it happened in case of floods and the red sludge disaster 2010. The Centre provides methodological support for on-site training and for the operation of the newly formed district educational centres.

In addition to that, the Hungarian authorities organise trainings for (high-level) officials, such as: protection committee chairmen, mayors, regional administrative staff, notaries, etc. According to the NDGDM, as of 2012 a total of 3,629 people had undergone training. The regular disaster management trainings for mayors are often linked with civil protection exercises. The trainings for notaries are organised in the framework of the county notary meetings.

Teachers in Hungary are also involved in relevant trainings, aimed at enhancing their awareness of disaster management and at equipping them with adequate information for preparing effectively their students. The programme has two levels – awareness training courses, organised twice a year, where teachers may receive disaster management knowledge, teaching methodology guidelines, and knowledge in related areas such as environment protection, consumer protection, energy security, first aid and panic treatment.; and one-day long trainings in local schools. They latter are carried out by the heads of the local civil protection branches once a year. Between 2003 and 2010, 559 teachers took part in disaster management trainings (305 persons from the capital and 254 persons from the counties). Several educational materials for teachers are available on the homepage of NDGDM.

In addition to that, each year the NDGDM announces the national disaster management youth team-competition for the 10-18- year old members of associations, organizations, clubs. The competitions are organised on local, on regional and national level with the aim to reach out to children and young people.

Institute of Disaster Management of the National University of Public Service

The Institute of Disaster Management of the National University of Public Service, which comprises the Department of Disaster Management Operations, the Department of Fire Protection and Rescue Control, and the Department of Industrial Safety, was established on 1 January 2012. In 2013 the Institute planned to launch an independent BSc programme in disaster management with three specialties - in disaster management operations, fire protection and rescue control, and industrial safety.

EU-funded trainings

Crisis management structures are also involved in EU-funded trainings, such as EU-HUROMEX 2008. The project (from 1 January 2008 to 30 June 2009) included the preparation, implementation and evaluation of a full-scale simulation exercise of civil protection interventions in case of serious flooding and the recovery of damages to the critical infrastructure.

5.4 Procurement

5.4.1 Procurement regulation

In Hungary, new provisions are applicable regarding public procurement as of 1 January 2012, i.e. the Public Procurement Act (PPA).

The law is criticised for reasons related to transparency as art. 9 lists no less than 13 cases in which the procedures laid down in the Act shall not apply, including when the fundamental security and national security interests of the country are concerned, and in the field of defence public supplies, services and works specifically designed for military and public order purposes.

According to art. 4, p. 4 of the Act, “procurement related to fundamental security interests of the country” is any procurement the subject-matter of which is directly linked to public works, public supply and services, which may exercise an influence on the physical, environmental, health, economic, national defence security of the population, including procurement in the benefit of preventing immediate flood damage in times of flooding emergency.

The PPA distinguishes among public procurement reaching EU thresholds (Part II of the Act) and national procedures (Part III of the Act). The latter are applied when public procurement contracts do not exceed EU thresholds and at the same time are equal or above national thresholds.

The “national thresholds” are determined annually by the Budget Act of Hungary and for the current year they are, exclusive of value added tax, as follows:

For the purposes of Part III – except for Chapter XIV (defining special rules for the contract award procedures in the public utility sector) – of the PPA:

- for public supplies and services: HUF 8 million
- for public works: HUF 15 million
- for public works concessions: HUF 100 million
- for service concessions: HUF 25 million

For the purposes of Part III, when applied together with Chapter XIV of the PPA:

- for public supplies: HUF 50 million
- for public works: HUF 100 million
- for public services: HUF 50 million

Also importantly, art. 122, p. 7 of the Act stipulates that the “contracting authority may launch a negotiated procedure without prior publication of a contract notice in the following cases as well: (a) If the estimated value of public supply or services does not reach HUF 25 million (app. EUR 81000, current currency rates on 21 October 2014) or the estimated value of public works does not reach HUF 150 million (app. EUR 488 000).”

Part III, art. 120(h) (h) stipulates an exception of the provisions of Act when the procurement is below EU threshold – “to Article 3(e)(f)(i)(k) of the Act LXXIV of 1999 on the management and organisation for the prevention of disasters and prevention of major accidents involving dangerous substances; as well as, in case of a crisis, emergency or serious situation, to public procurements carried out with the aim of preventing epidemic diseases in animals, directly preventing or avoiding damage caused by serious industrial or traffic accidents or by water, preventing adverse impacts on water quality, as well as for the purposes of protective preparedness or the subsequent reconstruction.”

5.4.2 Procurement procedures

The National Directorate General for Disaster Management is responsible for organising procurement in the field. For example, since 2012 the NDGDM has published at TED contract notices for services, work or supply, including but not limited to:

- digital cadastral maps
- disinfecting and exterminating services in urban or rural areas
- fire engines
- firefighting vehicles
- natural gas
- security services
- security, fire-fighting, police and defence equipment
- site-safety equipment
- software package utilities

5.5 Niche capabilities

The HUNOR and HUSZOR are considered described in detail in section 3.1 are considered as good examples of niche capabilities with respect to Hungary's CM system.

Resources

Legislative acts

Act CLXXXIX of 2011 on self-government

Act CXCI of 2013 on amending certain laws to increase the effectiveness of disaster management

Act CXI of 2011 on the Commissioner for Fundamental Rights

Act CXIII of 2011 – the National Defence Act

Act CXXVIII of 2011 on disaster management

Act XXXI of 1996 on fire control and technical rescue and fire

Other normative acts

Government Regulation 290/2011 on the implementation of certain provisions of Act CXIII

Government decree on the establishment, organisation and operation of the Disaster Management Governmental Coordination Committee (1150/2012)

NDGDM Regulation 49/2011 on professional disaster management bodies

NDGDM Regulation 61/2012 on the classification of local disaster management bodies

NDGDM Regulation 62/2011 on the rules for protection against disasters

The Fundamental Law of Hungary

Official documents (white papers, strategies, etc.)

Hungarian National Security Strategy

Online resources (e.g. websites of key CM organizations)

National Directorate General for Disaster Management, Ministry of Interior of Hungary, www.katasztrofavedelem.hu

Ministry of Interior, <http://www.kormany.hu/en/ministry-of-interior/contacts>

Hungarian Civil Protection Association, <http://www.mpvsh.hu/impressum>

Hungarian Red Cross, <http://www.voroskereszt.hu/>

Hungarian Atomic Energy Authority, <http://www.oah.hu>

Hungarian Scout Association, <http://cserkesz.hu/en/contact>

Hungarian Central Statistical Office, <https://www.ksh.hu/>

Seismological Observatory of the Hungarian Academy of Sciences, <http://www.seismology.hu/index.php/en/>

Commissioner for Fundamental Rights, www.ajbh.hu

Publications

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Hungary: National Progress Report on the Implementation of the Hyogo Framework for Action (2013-2015). Available at http://www.preventionweb.net/files/43038_HUN_NationalHFAprogress_2013-15.pdf.

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National Risk Assessment. Synopsis. Accessed September 23. Available at [http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.\[1\].doc](http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.[1].doc).

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Takacs, Viktoria, and Piotr Matczak, “Country study: Hungary.” *Analysis of Civil Security Systems in Europe*. Accessed September 8, 2014.

Expert interviews

Interview with a freelance journalist, 03 November 2014.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

IRELAND

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: Q4PR (Michelle Comer, Peter MacDonagh, Martin Mackin, Ruth O'Byrnes)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Background & Overview

Background

While Ireland has experienced a number of significant emergencies it has not suffered disasters of the severity and scale witnessed by other EU member states. Its geographic position means it has limited vulnerability to most high-impact natural disasters. Flooding and sustained winter storms are the principal events for which coordinated crisis management procedures have been deployed. The EU's Solidarity Fund has been used to assist Ireland only once – for flooding in 2009.

In the national risk assessment procedure the Irish authorities have identified the country's exposure in relation to energy supplies and ICT infrastructure as having particular potential to have severe impact. In the same context, a major disruption of maritime trade has been identified as representing a potential severe crisis.

Ireland organises its crisis management and resilience capabilities through the principles of a national framework, identified principal responders, comprehensive risk assessment and 'all hazards' preparation. It does not have significant specialist crisis management agencies or legislation.

Overview:

- Due to Ireland's relatively small experience of widespread crises the overall policy focus is on developing strong basic emergency services and then ensuring that they are capable of coordinating and upscaling in order to deal with exceptional situations. The priority is to embed key assessment and preparation steps within organisations rather than to develop separate stand-alone organisations or capabilities.
- Ireland has a well-developed system of strategies and coordination for crisis management and disaster response. This is mostly operated on an administrative rather than statutory basis.
- Strategic policy is set out at a cross-government level and is then supplemented by sectoral strategies and Standard Operating Procedures to be implemented within agencies and across a wider coordinated response.
- An active approach is taken to risk assessment at both national and local levels.
- An ongoing process of strategic planning and coordination is implemented on a cross-government basis led by the Office of Emergency Planning and the Government Task Force. The core response strategy is 'all hazards' with principal responders identified for each potential crisis and a coordination system for wider national crises.
- Principal response agencies cooperate and jointly plan at the national, local authority and non-statutory regional levels.
- Key stakeholders are: the Office of Emergency Planning (based in the Department of Defence), Department of the Environment, Community & Local Government (especially through its National Directorate for Fire and Emergency Management), the Health Service Executive, local authorities (including the fire service), an Garda Síochána (police service), Office of Public Works (flood control), utility companies (all are public sector), military, transport companies and critical infrastructure operators.
- Ireland has a relatively flat government structure, with just 31 local authorities and no statutory regions under the central government. As such, it is in a position to ensure the relatively consistent implementation of agreed strategies at national, regional and local levels.
- Mitigation and preparedness activity varies by sector. A national climate change policy is in place. Flood mapping is being expanded and made publicly available. This is accompanied by investment in flood prevention measures. Public health authorities run ongoing public awareness campaigns promoting responses which are relevant to major public health hazards.
- The bulk of financing is incorporated within the budgets of principal response agencies and is not separated from funding for ongoing work. As such it is not possible to estimate national financing for the area.
- Ireland has a number of prominent NGOs with extensive experience of humanitarian aid projects. Together with state agencies, these give Ireland a significant expert base for international emergency humanitarian activity as well as longer-term mitigation and recovery efforts.
- The Irish Army and Garda Síochána have 60 years of experience in peace-keeping and related work through the United Nations and OSCE.

- There is no specialist crisis management agency and no state of emergency legislation for natural disasters.
- There is no national alerting system though there are sectoral procedures including a colour-coded weather alert system and some local text and telephone warning systems.
- A range of NGOs supplement state activity particularly in the response and recovery phases.
- The impact of policies is difficult to assess. However, the after-event report on the severe winter storms in the period 2013-14 showed the impact of these storms, particularly in terms of loss of life, being significantly below the levels of two decades previously. The detail of warning and response activity would suggest that much of this improvement is attributable to recent planning and coordination work.

Table of Contents

IRELAND Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	875
Background & Overview	876
Table of Contents	879
List of Figures	881
List of Tables.....	881
List of Abbreviations.....	882
List of Definitions	883
1 Policy	884
1.1 Risk Assessment	885
1.2 Policy and Governance	890
1.2.1 Strategy scope and focus	892
1.2.2 Monitoring and analytical support to policy making; R&D	893
1.2.3 Policy for Prevention	893
1.2.4 Policy for Preparedness	895
1.2.5 Policy for Response	896
1.2.6 Policy for Relief and Recovery	898
1.3 Financing	899
1.3.1 Investing in preparedness	899
1.3.2 Investing in consequence management	900
1.4 Policy review, Evaluation & Organisational Learning	900
1.4.1 Post-Disaster Assessment	900
1.4.2 Departmental Lessons Learned systems	901
1.4.3 Centralised (national) Lessons Learned system	901
1.4.4 International exchange for Lessons Learned	901
1.4.5 Regular policy reviews	901
1.5 Resilience	902
1.6 Information sharing and data protection	902
2 Legislation	904
2.1 Crisis (emergency, disaster) management concept.....	904
2.2 General crisis (emergency, disaster) management law	905

2.3	Emergency rule	905
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	905
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	906
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	906
2.7	Legal regulations for international engagements of first responders and crisis managers	907
3	Organisation	908
3.1	Organisational chart.....	908
3.2	Organisational cooperation	909
4	Procedures	911
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	911
4.2	Operations planning.....	911
4.3	Logistics support in crises	912
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	912
5	Capabilities	913
5.1	Human resources	913
5.2	Materiel (non-financial) resources	914
5.3	Training	915
5.4	Procurement	915
5.4.1	Procurement regulation	915
5.4.2	Procurement procedures	916
5.5	Niche capabilities	918
	Resources	919
	Legislative acts	919
	Other normative acts	919
	Official documents (white papers, strategies, etc.)	919
	Online resources (e.g. websites of key CM organizations)	920
	Publications.....	920
	Expert interviews	924

List of Figures

<i>Figure 1: Map of 8 EM Regions</i>	884
<i>Figure 2: Schematic Risk assessment Process</i>	887
<i>Figure 3: National Risk Matrix</i>	889
<i>Figure 4: Five-Stage Emergency Management Paradigm</i>	891
<i>Figure 5: Coordination Centres for emergencies under MEM Framework</i>	898
<i>Figure 6: Generic Coordination centre information sharing</i>	902
<i>Figure 7: Core National Political, Strategic & Operational Response structure</i>	908
<i>Figure 8: Links between Major Emergency Plans and National and Other Plans</i>	910
<i>Figure 9: Info Management System.</i>	912

List of Tables

<i>Table 1: Most likely and most impactful hazards</i>	886
<i>Table 2: Classification of Likelihood</i>	887
<i>Table 3: Classification of Impact</i>	888

List of Abbreviations

AAIU	Air Accident Investigation Unit
CCBRN	Conventional Explosive, Chemical, Biological, Radiological or Nuclear
CMT	Crisis Management Team
DEC&LG	Department of the Environment, Community & Local Government
DFA	Department of Foreign Affairs & Trade
DoD	Department of Defence
DoT	Department of the Taoiseach (Prime Minister's Office)
EM	Emergency Management
MEM Framework	A Framework for Major Emergency Management
Gardai	An Gardaí Síochána
HSE	Health Service Executive
ICG	Irish Coast Guard
MEDP	Major Emergency Development Programme
NEPNA	National Emergency Plan for Nuclear Accidents
NSG	National Steering Group
NWG	National Working Group
OEP	Office of Emergency Planning, Department of Defence
PDF	Permanent Defence Forces
PES	Principal Emergency Services
PRA	Principal Response Agency
RSG	Regional Steering Group
RWG	Regional Working Group
SAR	Search and Rescue
SOP	Standard Operating Procedure

List of Definitions

All Hazards approach: An approach to major emergencies that recognises the common features of coordinated response and the management of common consequences regardless of the origin of the emergency.

Command: the process of directing the operations of all or part of a particular service or group of services, by giving direct orders.

Control: the process of influencing the activity of a service or a group of services, by setting tasks, objectives or targets, but without the authority to give direct orders.

Coordinate: to bring the different elements of a complex activity or organisation into an efficient relationship through a negotiated process. In an emergency context this may include a mandate/ authority to make certain decisions in pre-defined areas, where a normal consensual approach does not appear to meet the needs of an emergency situation.

Cooperate: to work together towards the same end.

Collaborate: to work jointly on an activity.

Hazard: Any Phenomenon with the potential to cause harm to members of the community, the environment or to the physical infrastructure, or being potentially damaging to the economic and social infrastructure.

Impact: The consequences of a hazardous event being realised, expressed in terms of a negative impact on human welfare, damage to the environment or the physical infrastructure or other subsequent consequences.

Lead Department: The government ministry or agency identified as leading on a particular hazard.

Major Emergency: is any event which, usually with little or no warning, causes or threatens death or injury, serious disruption of essential services or damage to property, the environment or infrastructure beyond the normal capabilities of the principal emergency services in the area in which the event occurs, and requires the activation of specific additional procedures and the mobilisation of additional resources to ensure the effective, co-ordinated response.

Risk: The combination of the likelihood of a hazardous event and its potential impact.

Risk Assessment: The process by which the hazards facing a particular community are identified and analysed in terms of the threat or risk that they pose.

Risk Management: Mitigation includes all actions taken to eliminate or reduce the risk to people, property and the environment from the hazards which threaten them.

Systems Approach: The systems approach to Major Emergency Management involves a continuous cycle of activity. The principal elements of the five-stage management cycle are; hazard analysis/ risk assessment, mitigation risk management, planning and preparedness, coordinated response, and recovery.

Ireland has relatively little experience of widespread crises but has a well-developed crisis management system. The core policy divides strategic and ongoing considerations from implementation. A substantial focus is on developing strong basic emergency services and then ensuring that they are capable of coordinating and upscaling in order to deal with exceptional situations. The priority is to embed key assessment and preparation steps within organisations rather than to develop separate stand-alone organisations or capabilities.

(Source: MEM Framework Appendices, 2008)

¹¹⁹⁹ Documents available at: www.emergencyplanning.ie

¹²⁰⁰ Department of the Environment, Community and Local Government: Available from www.environ.ie

¹²⁰¹ National Steering Group on Major Emergency Management; "A Framework for Major Emergency Management", 2006, Available from: www.mem.ie.

¹²⁰² Available from: www.mem.ie
National Steering Group on Major Emergency Management; "A Framework for Major Emergency Management, Appendices", 2008, Available from: www.mem.ie

1.1 Risk Assessment

Ireland has a limited experience with dealing with crises on a national scale. For example, the November 2009 floods remain the only example of a crisis reaching a scale where Ireland applied for support from the EU's Solidarity Fund.

Ireland undertakes an ongoing approach to risk assessment at both national and local levels. Ireland also ensures compliance with EU requirements¹²⁰³ that Member States develop a national risk management strategy which will support an EU approach to the prevention and management of natural and man-made disasters.

The Office of Emergency Planning publishes *A National Risk Assessment for Ireland* the latest version of which was published in December 2012.¹²⁰⁴ This document details a systematic approach to risk assessment across all areas. Risk assessment starts with an examination of the potential impact (severity of consequences to life and health, property and infrastructure, and the environment) of the hazards identified. A five-point scale is then used for categorising both impact and likelihood, ranging as shown in Tables 1 & 2. In considering the potential impact of a hazard two factors are taken into account - the type or nature of the impact, and the scale.

These are plotted onto a risk matrix and the frequency of each of the hazards is factored into the risk assessment. The intention is to ensure that the focus of major emergency management is on the hazards most likely to occur in an area, that the scale of preparation is in proportion to the risks and that the response to major emergencies builds out of normal response issues, such as resource mobilisation, co-ordination, decision making, etc.

A broader National Risk Assessment prepared by the Department of the Taoiseach (Prime Minister) includes a summary risk assessment for major emergencies with a review of fiscal, economic and social risks.

The MEM Framework separately sets out a risk assessment procedure aimed at the participating principal response agencies as a basis of major emergency management planning and preparedness strategies;

*"Each principal response agency should, in association with its partner response agencies, carry out a risk assessment in accordance with the procedures set down in this section. The initial risk assessment should be reviewed and updated annually, or as circumstances require."*¹²⁰⁵

¹²⁰³ Council Conclusions on a Community framework on disaster prevention within the EU, 2979th JUSTICE and HOME AFFAIRS Council meeting Brussels, 30 November 2009.

¹²⁰⁴ Department of Defence, 2012.

¹²⁰⁵ National Steering Group on Major Emergency Management; "A Framework for Major Emergency Management", 2006, Available from: www.mem.ie.

The risk assessment procedure underpins work in the later stages of the emergency management cycle. The risk assessment process is carried out initially within each principal response agency that focuses on their own procedures and perspectives and feeds this information into an inter-agency team, working under the aegis of the Regional Steering Group on Major Emergency Management.

The outcomes from the Regional process are then incorporated into each principal response agency's Major Emergency Plan.

The risk assessment comprises four stages as illustrated in Figure 2 which are;

1. Establishing the context
2. Hazard Identification
3. Risk Assessment
4. Recording potential hazards on a risk matrix

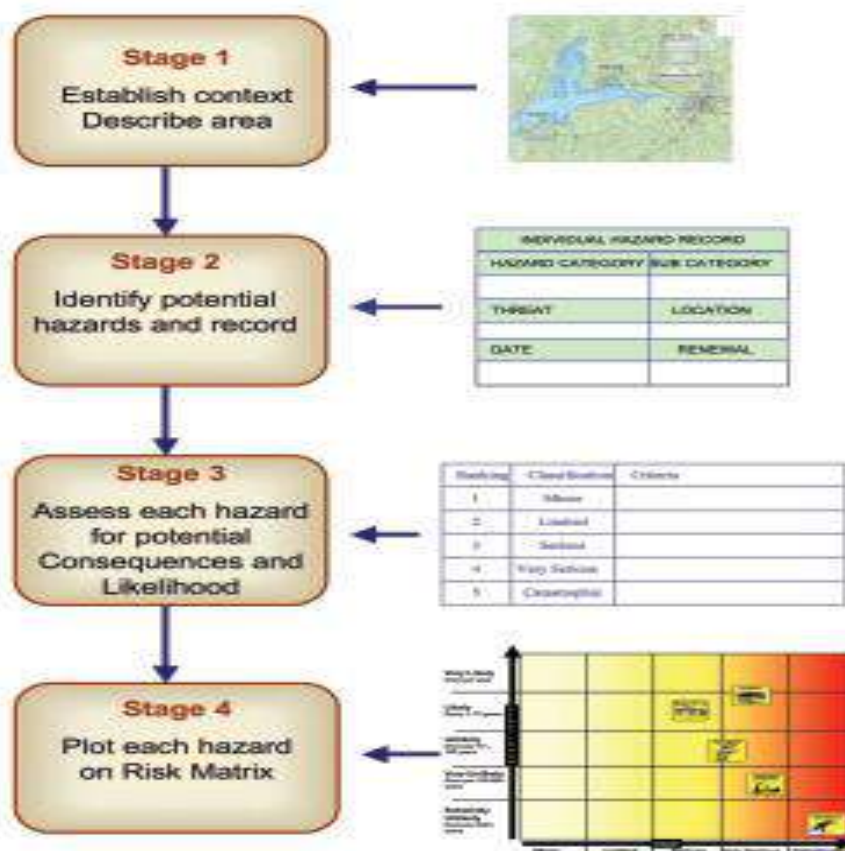
The current National risk assessment for Ireland has identified the following as the most likely and the most impactful risks for Ireland:

Table 14: Most likely and most impactful hazards

Most Likely	Most Impactful
Low Temperatures	Loss of critical infrastructure
Flooding	Infectious diseases
Radiation (domestic)	Disruption to energy supply

(Source: OEP; *A National Risk Assessment for Ireland*, 2012)

Figure 8: Schematic Risk assessment Process



(Source: A Framework for Major Emergency Management, 2006)

Table 15: Classification of Likelihood

Ranking	Classification	Likelihood
1	Extremely Unlikely	May occur only in exceptional circumstances; Once every 500 or more years
2	Very Unlikely	Is not expected to occur; and/or no recorded incidents or anecdotal evidence; and/or very few incidents in associated organisations, facilities or communicates; and / or little opportunity, reason or means to occur; May occur once every 100-500 years.
3	Unlikely	May occur at some time; and /or few, infrequent, random recorded incidents or little anecdotal evidence; some incidents in associated or comparable organisations worldwide; some opportunity, reason or means to occur; may occur once per 10-100 years.
4	Likely	Likely to or may occur; regular recorded incidents and strong anecdotal evidence and will probably occur once per 1-10 years
5	Very Likely	Very likely to occur; high level of recorded incidents and/or strong anecdotal evidence. Will probably occur more than once a year.

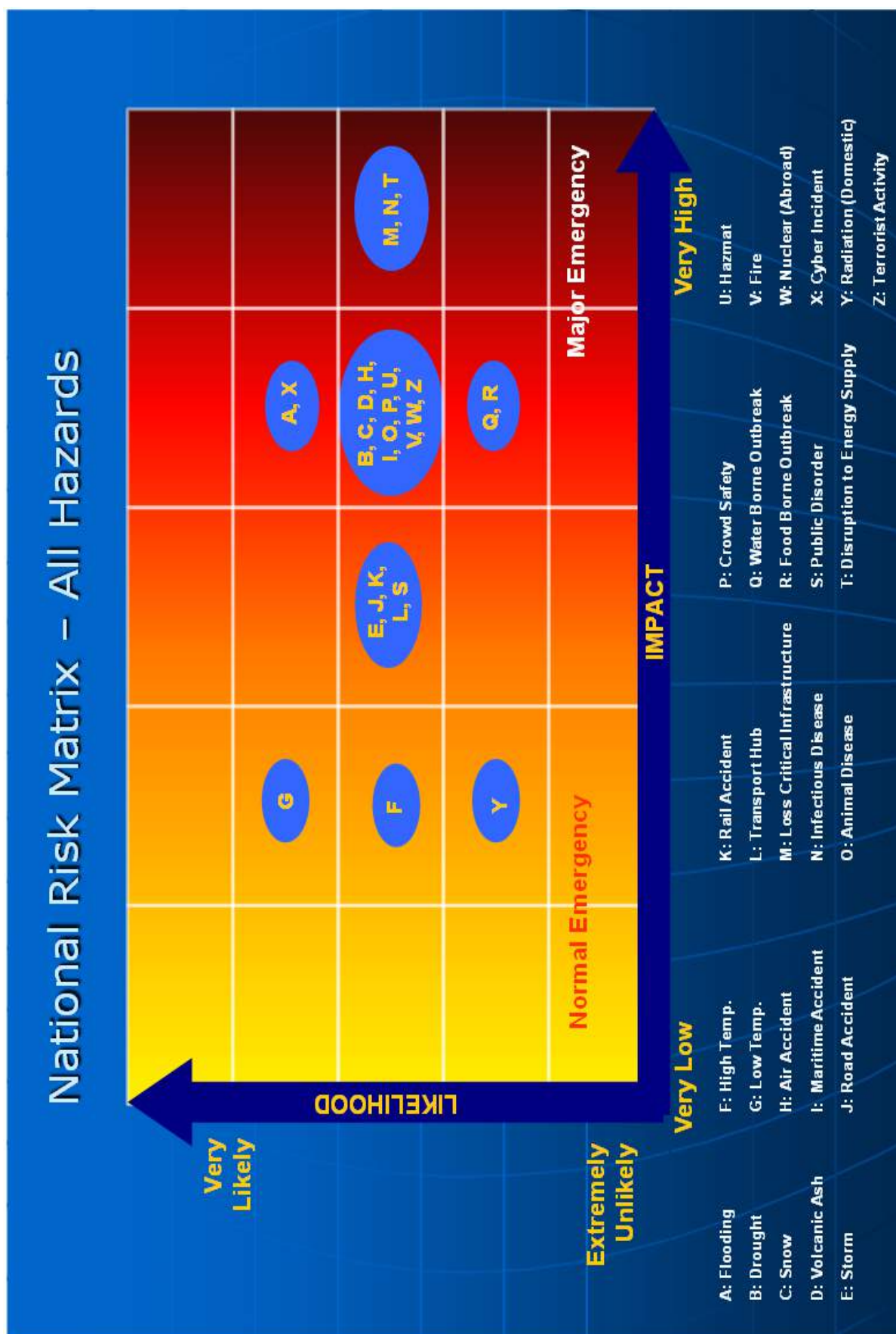
(Source: OEP; A National Risk Assessment for Ireland, 2012)

Table 16: Classification of Impact

Ranking	Classification	Impact	Description
1	Minor	Life, Health, Welfare Environment Infrastructure Social	Small number of people affected; no fatalities and small number of minor injuries with first-aid treatment. No contamination, localised effects <0.5M Euros Minor localised disruption to community services or infrastructure (<6 hours).
2	Limited	Life, Health, Welfare Environment Infrastructure Social	Single fatality; limited number of people affected; a few serious injuries with hospitalisation and medical treatment required. Localised displacement of a small number of people for 6-24 hours. Personal support satisfied through local arrangements. Simple contamination, localised effects of short duration 0.5-3M Euros Normal community functioning with some inconvenience.
3	Serious	Life, Health, Welfare Environment Infrastructure Social	Significant number of people in affected area impacted with multiple fatalities (<5), multiple serious or extensive injuries (20), significant hospitalisation. Large number of people displaced for 6-24 hours or possibly beyond; up to 500 evacuated. External resources required for personal support. Simple contamination, widespread effects or extended duration 3-10M Euros Community only partially functioning, some services available.
4	Very Serious	Life, Health, Welfare Environment Infrastructure Social	5 to 50 fatalities, up to 100 serious injuries, up to 2000 evacuated Heavy contamination, localised effects or extended duration 10-25M Euros Community functioning poorly, minimal services available
5	Catastrophic	Life, Health, Welfare Environment Infrastructure Social	Large numbers of people impacted with significant numbers of fatalities (>50), injuries in the hundreds, more than 2000 evacuated. Very heavy contamination, widespread effects of extended duration. >25M Euros Serious damage to infrastructure causing significant disruption to, or loss of, key services for prolonged period. Community unable to function without significant support.

(Source: OEP; A National Risk Assessment for Ireland, 2012)

Figure 9: National Risk Matrix



(Source: OEP; A National Risk Assessment for Ireland, 2012)

The risk assessment provides a basis for determining a range of steps at later stages of the emergency management cycle - especially in the Mitigation and the Planning and Preparedness stages. Each principal response agency uses the chosen scenarios as a basis for determining a range of essential response requirements for major emergencies. Response dimensions are qualitative or quantitative statement of the performance required of a system or resource to deliver an appropriate responses to mitigate the impact of the emergency.

These responses cover topics such as:

- Provision of resources or specialist equipment
- Number and quality of local responders
- Situations where plans or 'Standard Operating Procedures' are required for specific risks
- Areas where training and exercising should be focussed
- Situations/sites/events where specific protocols need to be established with third parties such as utility companies or with the private sector

In relation to *public perception of risk* there is limited research. Eurobarometer 383 (2012) places Ireland significantly below average in terms of levels of concern with the likely impact of natural and man-made disasters. The same research shows Ireland as having the second highest self-perceived level of awareness of EU-level civil protection activities.

1.2 Policy and Governance

There is no single agency responsible for major emergency management in Ireland and there is no dedicated legislative structure governing the area. Each Government ministry and public authority is responsible for maintaining emergency management functionality according to their statutory remits.

At a strategic level, the Government Task Force on Emergency Planning is the top-level body which coordinates and oversees the emergency management activities of all Government Departments and Public Authorities. This Taskforce, comprising those Ministers and/or Senior Officials of Government Departments and Public Authorities making a key contribution to the emergency management process, is chaired by the Minister for Defence. It meets 6-8 times a year and is viewed as a highly active forum.

The Office of Emergency Planning (OEP), within the Department of Defence, supports the work of the Government Task Force. The OEP operates a central coordination facility located in Dublin which is activated as appropriate and is highly flexible. The facility has the ability to ensure effective communication between government departments and agencies.

There is a clear distinction drawn between bodies which have an ongoing strategic remit and those which are activated when an emergency is anticipated, underway or requires a significant recovery effort. Ireland has adopted the "Lead Department" principle which means that the Government

Department having responsibility for a particular area of public life (transport, energy, health etc) takes the lead when an emergency occurs in that area.

In 2008, the Government agreed and published the “Strategic Emergency Planning Guidance”¹²⁰⁶ document which defines the Lead Department with respect to a range of major emergencies.

A number of sectoral documents cover operational plans by Lead Departments or a combination of Departments which have to work together in response to more common emergencies. Principal examples include maritime emergencies, nuclear accidents and pandemic flu (see appendix). However the most significant relates to the police, health and fire services which operate a permanent structure and strategy for addressing the most common major emergencies. The *MEM Framework* is distributed to all local authorities and responsibility for identifying risk and preparing plans are delegated at local level. The Framework implements the national “all-hazards” approach¹²⁰⁷. The Framework is constructed around a five-stage systematic frame for emergency management¹²⁰⁸. Major Emergency Management arrangements fit in with existing organisational and Government structures and coordination mechanisms are added as required. Principal response agencies are identified for each type of emergency and response is designed to build up from the lowest appropriate units of An Garda Síochána, The Health Service Executive and the Local Authorities.



Figure 124: Five-Stage Emergency Management Paradigm. (Source: A Framework for Major Emergency Management 2006).

Local authorities coordinate planning and response between first responder agencies, volunteer agencies and the media within their area. Local preparedness and response varies across the 26 county councils and the 5 city councils however *all plans are required to share the common feature of scalability up to and including a national emergency response.*

The Framework sets out arrangements which facilitate the principal emergency services in scaling-up the response as required, so as to utilise the full resources of the principal response agencies, and to work together in the management of large-scale incidents. The Framework provides the mechanisms for linking the work of the principal response agencies with those at other levels of Government.¹²⁰⁹

¹²⁰⁶ Department of Defence, 2004, “Strategic Emergency Planning Guidance Document”, Available from: www.emergencyplanning.ie.

¹²⁰⁷ “All-Hazards” is a term used in recognition of the common elements in the response to emergencies, regardless of the particular hazard that has given rise to the emergency.

¹²⁰⁸ The Five-stage systematic frame for emergency management is referred to as the “Safety Chain” in the Netherlands, “Integrated Emergency Management” in the UK.

¹²⁰⁹ National Steering Group on Major Emergency Management; “A Framework for Major Emergency Management”, 2006, Available from: www.mem.ie

In 2015 a unified national strategy document has been under discussion within government. It is understood that this does not involve a major alteration of the current approach; rather it proposes to evolve current practice and to broaden agreed strategic principles. A more comprehensive approach to mitigation and critical infrastructure is under discussion.

1.2.1 Strategy scope and focus

In April, 2011 the Government Task Force on Emergency Planning approved the “Guidelines for Coordinating a National-Level Emergency/Crisis Response”¹²¹⁰. This guidance document sets out the various steps involved in coordinating a national-level response for emergencies/crises. It sets out the triggers and activation procedures for convening a meeting of a National Coordination Group and the role of this Group. It clarifies the responsibilities of the lead government department and the roles and working relationships of all other departments/ agencies, which are required to contribute and undertake their roles in the context of the national emergency/ crisis management effort.

At national level, the objectives of civil protection or emergency planning are to implement measures to identify and mitigate natural and technological hazards. The planning, response and recovery for major emergencies which threaten persons, infrastructure, the environment or property is the focus at national, regional and local level and strategy is based on the nationally-determined strategy at all levels. The MEM Framework, which concerns the most frequent emergencies, is designed primarily to provide for the protection, support and welfare of the public in times of emergency. The Framework identifies uniform procedures in relation to those matters that can be standardised nationally such as the allocations of functions and responsibilities between agencies, command and control of operations and inter-agency co-ordination arrangements. The scope of the Framework also includes;

- Mobilising, controlling and making the best use of available resources for response at local, regional, national and international level, as appropriate.
- Setting out and allocating responsibility for ensuring that inter-agency coordination arrangements are developed and in place at local and regional level for effective coordination of individual response efforts to major emergencies, so that the combined result is greater than the sum of their individual efforts.
- Providing common terminology to facilitate coordinated and safe working
- Identifying and prioritising risks so as to ensure that existing services are prepared and equipped to deal with a range of realistic potential emergencies.
- Underpinning collective preparedness by the principal response agencies so as to ensure a prompt and effective coordinated response by them to a major emergency
- Ensuring that downstream crises arising from an emergency are managed effectively

¹²¹⁰ Department of Defence, 2011, “Guidelines for Coordinating a National-Level Emergency/Crisis Response”, Available from: www.emergencyplanning.ie

The Framework provides for an overall, combined response as soon as a major emergency is declared however it does not seek to address the detailed response procedures of the relevant response agencies in relation to specific incidents or hazards.

Separate to the MEM Framework, there are specific National Emergency Plans dealing with areas such as pandemic and nuclear accident which can be activated by the lead Government Department or the appropriate national body.

1.2.2 Monitoring and analytical support to policy making; R&D

Ireland does not have a specific separate budget for resilience-related research and development. However it has in place an active system of review which is central to policy development.

Support for **risk assessment** is provided by various Government Departments depending on the risk identified or the impact predicted. This support is usually provided through the temporary provision of personnel, the provision of critical information or resources or through project specific funding. The OEP convenes a meeting every six weeks and all ministries are invited to attend. It is at these meetings that monitoring and analytical support is managed. Academic support is provided by Dublin City University (DCU) Business School which employs experts in the field of Emergency Management. DCU provides support through reviewing and assessment of response mechanisms as well as assisting in drafting the Framework documents.

After-event reviews are prepared as are annual reviews of plans. Ireland has a policy of open access to plans in this area, so reviews, strategies and standard operating procedures are publicly available. There is a high acceptance within the system of the right of the media and general public to be informed and have access to most information.

DCU and Maynooth University offer postgraduate-level courses dealing with emergency and humanitarian management. As these courses progress they are increasing the level of policy expertise in Ireland.

The Irish weather service *Met Éireann* is involved in significant academic research projects concerning the prediction and understanding of adverse weather events. Due to Ireland's location, this work is of significant relevance to the UK and much of the EU. *Met Éireann* is a participant in Meteoalarm¹²¹¹.

1.2.3 Policy for Prevention

Ireland does not have a separate prevention strategy. In general, responsibility for the mitigation of specific hazards lies with the organisations and companies which own and operate the facilities and

¹²¹¹ For more information on Meteoalarm see; www.meteoalarm.eu

services where the relevant hazards are found, such as airlines, railway companies, chemical manufacturers, etc. Such organisations are referred to as “risk holders”. There are also statutory provisions, which provide for regulation/risk management, and bodies which hold responsibility in this regard are called “risk regulators”.

It is accepted that the principal response agencies may not be in a position to implement significant mitigation as part of the major emergency management process. However, An Garda Síochána, the Health Service Executive and the Local Authorities can be involved directly in extensive mitigation of potential generic emergencies through their work as “risk regulators” in other areas.

Typical examples include:

- the enforcement of legislation related to road safety and safety in places of assembly (An Garda Síochána);
- monitoring of food and water safety (the Health Service Executive);
- control of development through the planning and building control process and the enforcement of fire safety and dangerous substance legislation (the Local Authorities).
- Flood mapping and mitigation efforts (Office of Public Works)
- The National Climate Change Plan (Department of the Environment, Heritage and Local Government and the Environmental Protection Agency)

The ‘risk regulators’ can often require specific plans based on a site or hazard and they often practice scenario based exercises on a regular basis with the ‘risk holders’. Reviews of plans and exercises inform updates and can often increase mitigation measures.

Mitigation by the principal response agencies is generally limited by resources. It is accepted that educating the public on possible emergencies is a vital element of building resilience in communities and the development of key messages for targeted audiences is an essential first step. However for most of the period of the Framework’s operation there has been a fiscal emergency in Ireland and the resources allocated to preparedness are low.

The Office of Public Works is currently rolling-out **flood mapping** to the public. A total of €225 million has been set aside for capital flood risk management and mitigation expenditure in the 'Infrastructure and Capital Investment Medium Term Exchequer Framework for the period 2012-2016'. This annual allocation of €45m has enabled the OPW, in conjunction with its local authority partners, to address both existing and future flood risk pro-actively and systematically through a number of complementary programmes. This is the most significant ongoing risk communication measure undertaken by an Irish government department. It is intended that this work will have a long-term impact on local risk mitigation and is being accompanied by local communications work in priority localities.

Appropriate messages and effective mediums to disseminate the message are generally known from national to local level however resources are limited and a very limited approach to raising

awareness. This has an impact on mitigation and building resilience in communities across the country.

1.2.4 Policy for Preparedness

Each Department and Agency is responsible for addressing preparedness measures relating to the areas for which they are the designated principal responder. In practice this focuses on operational preparedness rather than a wider civil preparedness agenda.

In terms of the most frequent major emergencies, in addition to national level planning the relevant Chief Superintendent of each Division of An Garda Síochána, the designated Senior Manager in each Health Service Executive Area and the City or County Manager of each Local Authority is responsible for the principal response agency's major emergency management arrangements and preparedness. While these districts do not involve aligned boundaries and populations sizes, in practice this is not felt to be a problem.

The MEM Framework makes explicit the expectations in regard to preparedness;

- Emergency plans must be prepared by each agency and be consistent with the Framework
- Inter-operability must be factored into emergency plans and reviewed for consistency with partner agencies
- Principal response agencies must actively participate in the appropriate regional steering group
- Principal response agencies should participate in the preparation of a Plan for Regional Level Coordination through the regional steering group and participate in its annual review..
- Each principal response agency should provide for working with appropriate national bodies and responding to and activating appropriate aspects of their Major Emergency Plan following requests arising from national emergency situations.
- Principal response agencies should have sub-plans for responding to notification from the Local Authorities of severe weather warnings, whether a major emergency is declared or not.
- Each principal response agency should review its preparedness on an annual basis by “walking through” a selection of scenarios identified in the risk matrix.
- Each principal response agency should put support teams in place for key roles and should prepare Operational Protocols
- Each principal response agency should prepare and implement a staff development and training programme designed to build the knowledge, skills and experience of staff that will fill key roles in response to a major emergency.
- Internal exercise programmes on a three-year cycle with clearly defined and progressive objectives are required to validate its preparedness for responding to major emergencies. Joint or inter-agency training and exercise programmes should be included.
- Each principal response agency should ensure that arrangements are in place to authorise procurement and use of resources to assist in response to major emergencies

The fulfilment of the MEM Framework's preparedness strategies varies, especially as soon after the MEM Framework was published, a dramatic fiscal consolidation was implemented which impacted

on all levels of the Irish public sector. However, there does appear to be a significant commitment to the effective implementation of commitments under the Framework.

Major Emergency Plans, based on the MEM Framework, are in place in all local authority areas and may be activated by any one of the Principal Response Agencies: the Local Authorities, An Garda Síochána and the Health Service Executive. The Major Emergency Plan of each agency sets out that agency's generic response arrangements, incident specific sub-plans as well as its contribution to the combined response of all agencies. The detail and rigour of some plans is greater than others and regional plans usually focus on risks that have occurred in the past or on those with a catastrophic impact. Coordination features heavily in the Framework and this is communicated in regional Emergency Plans which are tested periodically for their command and control functions using table top exercises which reduces the cost of exercising considerably.

The overwhelming focus of preparedness work is on ensuring that agencies are ready to respond well to emergencies. Extremely limited, and undefined, resources have been available to invest in more general resilience promotion.

Agencies at local level undertake basic educational roles in relation to schools and organisations. At a national level a limited 'Winter Ready' publicity campaign is run each year focused on actions which would be of assistance in severe weather as well as most crises situations.

1.2.5 Policy for Response

As outlined earlier, Ireland operates on the dual principles of identified principal responders and control at the lowest appropriate level. In the implementation of the Framework significant emphasis is placed on identifying key roles and responsibilities as well as operating procedures.

The Framework identifies the following information as key messages for the public concerning crisis preparation and response;

- The types of emergencies which are most likely
- What is being done to protect the community
- Early warning systems (where applicable)
- What you can do to protect yourself and your family
- Looking out for vulnerable neighbours
- Shelter/ evacuate ("Go in, Stay in, Tune in")
- Making a call for assistance using 999/ 112
- What to do if you happen upon an emergency
- How critical incident stress can affect you
- Where to get more information

The relevant Chief Superintendent of each Division of An Garda Síochána, the designated Senior Manager in each Health Service Executive Area and the City or County Manager of each Local Authority are responsible for the effectiveness of their agency's response to any major emergency which occurs in its functional area.

A Major Emergency Mobilisation Procedure is usually appended in each Emergency Plan and once an emergency is declared the command, control or communication centre will notify all principal response agencies that will in turn activate their internal mobilisation procedure. The response can be scaled up from a local response to a regional or national response.

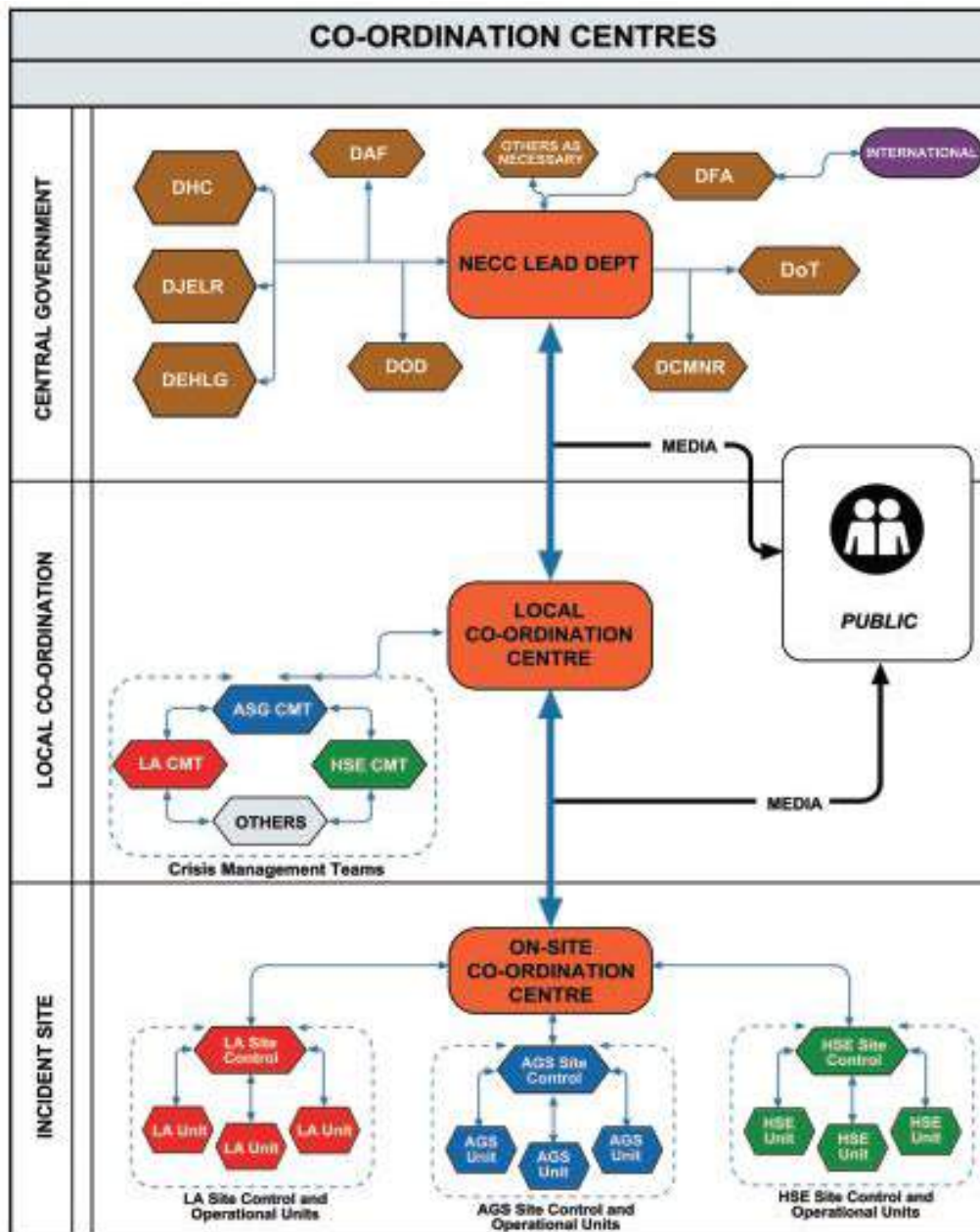
On a more general national level, protocols are in place for the triggering of a National Coordination Group to be chaired by the lead department and ensuring a cross-government approach.

The Government Information Service (GIS) plays a key role in preparing and projecting the Government's message on emergency management and response issues. An Emergency Planning Media Unit, chaired by the GIS, promotes and coordinates this work. This group, comprising Press and Information Officers of Government Departments and other key public authorities, continues to update and coordinate arrangements for handling enquiries from the media, as well as providing information and advice to the public.

The use of social media to share information in any stage of an emergency varies between Government Departments, PRAs and Local Authorities. There is a strong awareness of the power of social media to engage with the public however with limited resources, it is not always possible especially in smaller Local Authorities. There is no programme available or policy on social media that covers all of these levels in an emergency. Action 10 of "Supporting Public Service Reform eGovernment 2012-15" states that; "All public bodies will develop a social media usage policy and will prepare a short plan regarding how they will maximise the potential of social media to improve access to services"¹²¹².

¹²¹² Department of Public Expenditure and Reform; "Supporting Public Service Reform eGovernment 2012-2015", Available from www.e.gov.ie.

Figure 11: Coordination Centres for emergencies under MEM Framework



(Source: A Framework for Major Emergency Management Appendices, 2008)

1.2.6 Policy for Relief and Recovery

Relief and recovery is recognized as an important phase in the MEM Framework and it should happen after the individual services have been stood down and an operational debrief has been carried out by each agency. Each principal response agency has a mandate in the recovery phase; An Garda Siochana

- Identification of fatalities
- Preservation and gathering of evidence
- Investigation and criminal issues
- Dealing with survivors
- Dealing with relatives of the deceased and survivors
- Provision of an appropriate response to the immediate public need

Health Service Executive

- Provision of health care and support for casualties and survivors
- Support for relatives of casualties and survivors
- Restoration of health services
- Responding to community welfare needs

Local Authority

- Clean-up
- Rebuilding the community and infrastructure
- Responding to community welfare needs
- Restoration of services

A policy of preparing after-event reports for all significant emergencies is implemented. These identify short, medium and long-term impacts as well as lessons learned and are publicly available. All agencies accept their responsibility to keep the public informed of relief and recovery activity.

1.3 Financing

1.3.1 Investing in preparedness

There is no consolidated figure for investment in preparedness. The bulk of investment is within the core ongoing funding of responder agencies.

A figure of roughly €45 million per annum is available for flood risk management and mitigation, plus another roughly €10 million (2015 estimate) for the repair of flood- damages to flood protection infrastructure in past storms.¹²¹³ A Preliminary Flood Risk Assessment for the country (as required by the EU Floods Directive) is being published to inform the prioritising of areas for more detailed analysis in the individual catchment areas under the Catchment Flood Risk Assessment and Management (CFRAM) programme.

There is no evolved engagement by the insurance industry or other private sector actors, though the Department of Finance has begun discussions with Insurance Ireland, the umbrella organisation for the insurance industry. There is no expectation of EU funding for preparedness work other than in the context of general infrastructure development funded through regional development policies.

There is no distinct disaster mitigation fund. Identification and mitigation of hazards forms part of the normal operations of public and private organisations. The Framework defines mitigation as “any

¹²¹³ Department of Public Expenditure & Reform; “Infrastructure and Capital Investment 2012-14: Medium term exchequer framework”. Available from: www.per.gov.ie.

actions which are taken in advance of the occurrence of an emergency to reduce the probability of that event happening or that reduce the loss/damage that might otherwise have been caused if the event does happen”¹²¹⁴.

1.3.2 Investing in consequence management

All expenditures incurred during a particular emergency or crisis must be properly authorised, executed and accounted for under the appropriate public expenditures mechanisms. There is no developed research on expectations or practice in the funding of recovery activities. In practice there has been a mix of agencies funding recovery from within their budgets, central government providing some extra funding and, above a certain level, the state assisting in cases where there is no insurance. The most recent review of damage from the acute winter storms in 2013/14 focused solely on the cost to public infrastructure and facilities.

Public/private activity in relation to flood insurance is at a low level, however it is likely to be a significant issue in the coming years as the flood-mapping exercise is completed and begins to be reflected in home insurance costs and availability.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Ireland has an evolved system of post-disaster assessment. The MEM Framework document requires that there be a review of the response to all major emergencies declared through its Steering Group. The review panel draws information from the response agencies and the panel is made up of representatives of government ministries as well as academics and senior officers from the principal response agencies. Each agency is expected to complete a self-assessment on the preparedness and response phases.

The assessment of economic impact is generally limited to the impact on public infrastructure. This is a significant gap.

All such reviews are published. Post-disaster assessments are viewed as accessible and constructive. In addition, within agencies and in the Steering Group for Major Emergency Management an ongoing programme of reflection is evident. Candid discussions are encouraged.

The review panel for after-event reports includes an external expert element. As such, the reports are seen as challenging and constructive rather than defensive of the interests of agencies.

¹²¹⁴ National Steering Group on Major Emergency Management; “A Framework for Major Emergency Management”, 2006, Available from: www.mem.ie.

A similar approach to independent review and transparency is applied across other departments and agencies.

1.4.2 Departmental Lessons Learned systems

Departmental lessons learned are established through the Steering Group for Major Emergency Management where each department is represented. Internal agency communications stem from this.

1.4.3 Centralised (national) Lessons Learned system

Systems are in place to derive lessons learned from experiences which includes external input from academic institutions and experts. The OEP facilitates the sharing of information between stakeholders. The OEP also provides a forum to learn lessons from disasters that occur in other countries. An example of this is Hurricane Sandy in the US which provided an opportunity to examine and review Ireland's ability to deal with a severe wind storm. This review was carried out under the guidance of the OEP three weeks before the high wind storms occurred in 2013-2014 and is believed to have contributed to the effectiveness of the national response.

1.4.4 International exchange for Lessons Learned

Ireland exchanges information through Government Departments with Great Britain and the devolved administration in Northern Ireland on issues of mutual interest. Cross border policing has a formalised process due to the ongoing peace process, however other agencies and Governmental Departments lack this structure and policies.

Government Departments are aware of the international dimension of emergency planning. Contacts have been established and strengthened where necessary with the mechanisms provided by the United Nations, the European Union, the World Health Organisation and other international bodies for dealing with emergency planning and response. This has allowed Ireland to tap into reservoirs of knowledge and learn lessons from this community.

1.4.5 Regular policy reviews

Ireland has an active approach to policy review procedure. Through the separation of strategic oversight and operational implementation the effect is to ensure ongoing review. Due to Ireland's flat governing structures these are not reflected in legislation while practice as set out in national documents is often updated well in advance of this being reflected in revised documents. A transparent approach to after-event reviews means that all persons have the opportunity to review policy effectiveness.

The national strategic policy framework is currently under review and being discussed at a senior level within government.

1.5 Resilience

Resilience is not a consistently applied principle. The MEM Framework and its supporting guidance and protocol documents refer to resilience in the following manner;

“Resilience is the term used to describe the inherent capacity of communities, services and infrastructure to withstand the consequences of an incident, and to recover/restore normality.”¹²¹⁵

As such, it is firmly a ‘bounce back’ concept rather than drawing on more complex ideas.

Local authorities are substantially responsible for building resilience in local communities however the budget for this varies in each area and it is generally larger in areas that have experienced some form of significant emergency. The document *“Preparing for Major Emergencies”*¹²¹⁶, issued to each household in the country during 2008 by the Office of Emergency Planning, provides important information for individuals on how to prepare for a major emergency and what to do in the event of a major emergency. This and the annual ‘Winter Ready’ campaign represent the only distinct national resilience promotion efforts.

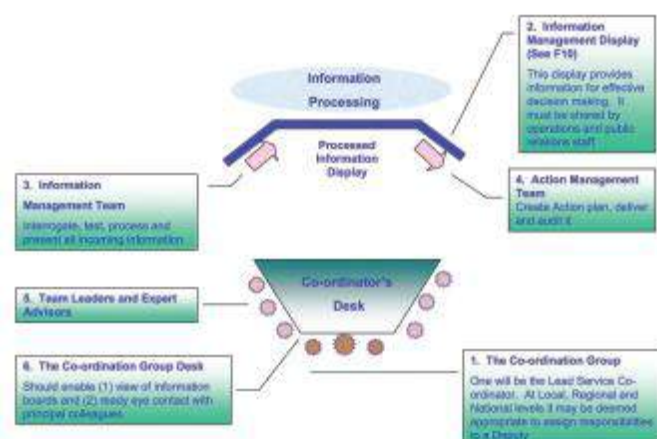
Planning regulations seek to mitigate the potential impact of disasters on infrastructure and the general built environment.

1.6 Information sharing and data protection

Ireland has a relatively open approach to information sharing in this area. Data protection standards are overseen by a national Data Protection Commissioner and are in line with EU regulations.

Information sharing occurs between PRAs as part of crisis management procedures in the event of a National Emergency. For example, the HSE will provide information on vulnerable people to the Gardai who will check on them to ensure that they are safe prior, during or after an event. Information on individual casualties will be provided only by An Garda Síochána, who will establish a Casualty Bureau to collect and collate the details of all casualties and survivors. Once it is operational, the telephone numbers for the public to contact the

Figure 126: Generic Coordination centre information sharing



(Source: A Framework for Major Emergency Management Appendices, 2008)

¹²¹⁵ National Steering Group on Major Emergency Management, *A Framework for Major Emergency Management*, 2006, Available from: www.mem.ie

¹²¹⁶ Office of Emergency Planning; *“Preparing for Major Emergencies”*, 2008, Available from: www.mem.ie

Casualty Bureau will be issued to the media by the Garda Press Office.

Government Departments may share information on specific threats such as infectious animal diseases or terrorist threats.

Local Authorities may use volunteer organisations to help cope in the event of an emergency. In the pre-planning phase, the Local Authority identifies the competencies required for any personnel and while the volunteer organisation will exercise with the PRAs, the responsibility for personnel rests with the volunteer organisation that provides them and therefore information is not shared in a formal way and *a database of volunteers is not maintained at local, regional or national level.*

2 Legislation

2.1 Crisis (emergency, disaster) management concept

Ireland does not have specific emergency management legislation beyond standard legislation for police, fire, environment and health authorities. Emergency planning is part of general planning carried out by each Government department/ agency under its appropriate legislation. Emergency Planning arrangements and actions are governed by a policy framework adopted by government.

The obligation to exercise an oversight in relation to peacetime emergency planning is placed, by Government decision (Ref. S180/46/01/0002), in the Minister for Defence through the Office of Emergency Planning. This is an administrative rather than statutory arrangement.

Ireland is a strongly centralised government with only 31 local authorities which hold powers which are both limited in scope and subject to central oversight. There are no local powers relating to police or health agencies. As such, it can be argued that a separate statutory basis for crisis coordination is not as important in Ireland as it is in federalized and regionalised countries. In after-event assessments the lack of clarity on powers has not been identified as an issue.

In interviews for this review, respondents stated that they value the flexibility which not having detailed legislation allows.

Each government department is responsible for ensuring that emergency plans exist in respect of its own area of responsibility. Operational responsibility for incidents however, rests with the emergency services under the aegis of the department concerned. Individual departments are also responsible for any necessary coordination between departments and/or services. Lists of contact officers and experts in the public services are kept up to date on a central level. Depending on the magnitude of the disaster, the Government can set up a national committee to monitor and advise on the crisis at central level.

In the event of being called on for assistance in a major emergency, the Defence Forces will operate under the provisions of the Defence Acts, 1954 to 1998, as amended, and in accordance with agreed Memoranda of Understanding (MOUs) and Service Level Agreements (SLAs). The principal response agencies can request assistance from the Defence Forces either in Aid to the Civil Power (An Garda Síochána) or in Aid to the Civil Authority (Local Authority or Health Service Executive). The major distinguishing feature between the two types of Aid is that the Defence Forces response to requests for Aid to the Civil Power is primarily an armed response while Defence Forces response to requests for Aid to the Civil Authority will be unarmed. In addition, the Defence Forces have a key role to play in responding to emergencies involving improvised explosive devices, when they are called upon to

assist An Garda Síochána by the provision of Explosive Ordnance Disposal (EOD) teams in an Aid to the Civil Power role.

2.2 General crisis (emergency, disaster) management law

As stated in 3.1, overall crisis management arrangements are not set out in separate legislation.

Airports are required by International Civil Aviation Organisation (ICAO) rules to prepare emergency plans and to maintain emergency services commensurate with the categories of aircraft using the airport.

For all ports, the *Harbours Act, 1996*, places responsibility on the harbour master for the safety of shipping and all activities within the defined port limits. The legislation also requires that emergency plans be prepared in respect of the major ports. These emergency plans are designed generally to deal with incidents, in the first place using the port's own resources. The Irish Coast Guard is responsible for co-ordinating the response to marine incidents outside port limits, except in case of search and rescue, when all marine areas, including ports, are within its remit.

There are both legislative and procedural arrangements, which require that emergency plans be prepared for specific sites or events (e.g. SEVESO sites¹²¹⁷, airports, ports, major sports events, etc.).

Publicly licensed broadcasters are obliged as part of their licence to carry warnings. This power has not been invoked as, in practice, authorities find broadcasters to be willing to carry timely and accurate information when needed.

2.3 Emergency rule

The Irish constitution allows for emergency legislation to be passed by parliament but only insofar as it is necessitated by armed rebellion or war.¹²¹⁸ There is no legislation for emergency rule during disasters.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The obligation to exercise an oversight in relation to peacetime emergency planning is placed, by Government decision (Ref. S180/46/01/0002), in the Minister for Defence through the Office of Emergency Planning however the responsibility to ensure that emergency plans are adequately

¹²¹⁷ Upper Tier and Lower Tier SEVESO sites are defined in: Article 3 of Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012.

¹²¹⁸ Bunreacht na hÉireann, Article 28.3.3.

assessed, reviewed, exercised and validated remains with the lead Minister and Government Department responsible for a particular area.

The MEM Framework establishes formal operational procedures between the principal emergency response agencies (police, health, fire, local authorities). These include a coordination approach based in the Department of the Environment, Heritage & Local Government.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Local authorities have significant responsibilities under the national policy framework however they do not have distinct powers to act autonomously. There are no regional authorities but key agencies have regional coordination structures which are established on an administrative basis

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

There are no national legal regulations governing the involvement of volunteers and specialised NGOs in civil protection however individual organisations do have some legislative underpinning.

The Civil Defence service¹²¹⁹ is a statutory organisation of volunteers which can provide a very important resource for use during major emergencies, in support of the principal response agencies. The Civil Defence Act 2002 aims to enable the ongoing development of Civil Defence on a national basis into a second-line emergency service working in support of and in cooperation with all of the mainstream emergency services. Civil Defence services, which include over 3,000 active volunteers, are structured on a county basis and are run by the Local Authorities. A Civil Defence Board, with a national Civil Defence Headquarters, oversees and assists the development of the Local Authority based Civil Defence organisation.

The Irish Red Cross is established and regulated under the Red Cross Acts, 1938-54. These statutes define a role for the Irish Red Cross as an auxiliary to the state authorities in time of emergency and also provide a specific mandate to assist the medical services of the Irish Defence Forces in time of armed conflict. The Chairman of the Red Cross is appointed by the President, on the advice of the Government. The Department of Defence is the Government Department associated with the organisation – a senior official of that department sits on the Board of the Irish Red Cross.¹²²⁰

Irish Red Cross's membership comprises 2,500 volunteers, supported by staff in Head Office in Dublin and three regional offices. Volunteers are organised in local units, with overarching county and regional structures. The membership is country wide, with 111 units in twenty-five of the twenty-six counties in the state. The main relationship with the principal response agencies in major emergency

¹²¹⁹ Information on the Civil Defence service can be obtained on www.civildefence.ie

¹²²⁰ Information on the Irish Red Cross can be obtained on www.irishredcross.ie

response is as an auxiliary resource to the ambulance services. Subsidiary search and rescue and in-shore rescue units of the Irish Red Cross support An Garda Síochána and the Irish Coast Guard.

The normal range of voluntary emergency services includes the Order of Malta Ambulance Corps, St John's Ambulance Service, Mountain Rescue Teams, Cave Rescue Teams, Search and Rescue Dog Associations, River Rescue Units, Community Inshore Rescue Units, the Royal National Lifeboat Institution and Sub-Aqua Units. Their ongoing service to the public includes attendance at public events, as well as searches for missing persons and the rescue of persons in distress.

2.7 Legal regulations for international engagements of first responders and crisis managers

There are no legal regulations for the engagement of first responders and crisis managers in international civil protection tasks.

Ireland accepts its responsibility to participate in the Community Civil Protection Mechanism to facilitate the provision of assistance between the member states in the event of major emergencies and Ireland would request that assistance through the National Liaison Officer at the Department of the Environment, Heritage and Local Government (National Directorate for Fire and Emergency Management).

There is a long-standing tradition of mutual assistance between the emergency services in Northern Ireland and the border counties. An April 2002 agreement between the British and Irish Governments provides for a range of co-operative measures between An Garda Síochána and the Police Service of Northern Ireland.

Existing arrangements between individual emergency services in both jurisdictions are in place and operational. During an emergency, agencies inform the Local/Regional Co-ordination Centre of any unilateral activation of arrangements with services in Northern Ireland. Requests from a local or regional coordination group for additional assistance, outside of/above that arranged by the individual services, are transmitted by An Garda Síochána to the Police Service of Northern Ireland, in accordance with internal code procedures of An Garda Síochána.

3 Organisation

3.1 Organisational chart



Figure 13: Core National Political, Strategic & Operational Response structure

- The Government Task Force on Emergency Planning is the top-level body which coordinates and oversees the emergency management activities of all Government Departments and Public Authorities. This taskforce is comprised of Ministers and/or senior officials of Government Departments and Public Authorities making a key contribution to the emergency management process.
- The Office of Emergency Planning which exists within the Department of Defence supports the work of the Government Task Force.
- Where there is a security dimension to an emergency the National Security Committee chaired by the Department of the Taoiseach has a role.
- The National Cyber Security Centre is under the Department of Communication, Energy and Natural Resources and is responsible for leading efforts relating to cyber security in general including the response to emergencies.

- Ireland has adopted the 'Lead Department' principle which means that the Government Department having responsibility for a particular area takes the lead when an emergency occurs in that area. This process is supported by the "Strategic Emergency Planning Guidance" which is a document published by the Government in 2008 and defines the lead department with respect to a range of emergencies.
- On a day-to-day operational basis the MEM framework between the police, health and local authorities is chaired by the National Directorate for Fire and Emergency Management, in the Department of the Environment Community and Local Government.
- There are eight regions for civil protection purposes and arising from the framework, each of these regions has an inter-agency Regional Steering Group (RSG) on Major Emergency Management. The RSG is comprised of senior personnel from the PRAs within that region and each region also has Regional Working Groups (RWGs) to support the RSG and to undertake the functions assigned at regional level.
- These eight designated Major Emergency Management (MEM) regions within the country consist of multi-agency teams. Each PRA initially prepares a structured hazard analysis and risk assessment using the Framework as guidance and then coordinates a multi-agency plan for the region. The plans are scalable and are linked with National Plans as per the guidance of the Framework.
- The Local Authorities coordinate the EM plans through a structured hazard analysis and risk assessment carried out by the PRAs. The focus is primarily on a comprehensive emergency management process through an all hazards approach as directed by the Framework.
- Volunteers and volunteer organisations are coordinated through the PRAs who lead the response and collaborate with volunteer organisations in training and planning. For example; St. Johns ambulance and the Order of Malta work under the HSE.
- Some private businesses are required, as part of licencing agreements, to have comprehensive emergency plans due to the nature of their industry (i.e. pharmaceutical, chemical, aviation). The local authorities ensure that the PRAs and these private businesses plan, practice and review these plans every three years or less depending on their agreements.

3.2 Organisational cooperation

- The lead role for planning the State's response to an emergency rests with the functional Minister and his or her Government Department, with support from other key departments and public authorities. The functional Department has the lead role in the areas of risk assessment, prevention, mitigation, response, maintenance of public confidence and recovery, working in association with other Government Departments and public authorities.
- It is the responsibility of the lead Department to work with other Government Departments and PRAs to ensure that their plans are sufficiently detailed and properly coordinated.
- Due to their central involvement in most identified risks and past emergencies the police, health service and local authorities have a highly developed procedure for cooperation as set

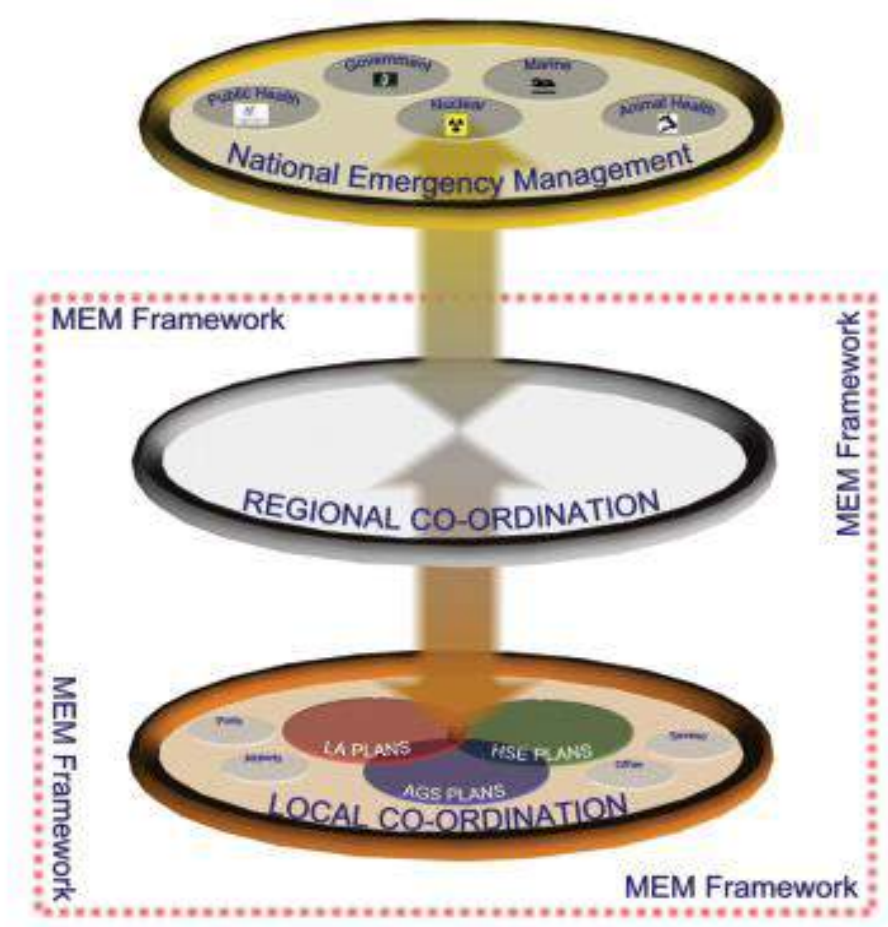
out in the MEM Framework. These principal response agencies take a leading role in promoting cooperation.

- Command and control issues are addressed through consultation and engagement with all parties involved in response, through a structured exercise programme.

There are a number of organisations and agencies, which may be called on to assist the principal response agencies in responding to major emergencies. The arrangements for this assistance should be agreed with each agency (or confirmed in the case of pre-agreement) and set out in each principal response agency's Major Emergency Plan. The organisations may be grouped as follows:

- Defence Forces;
- Civil Defence;
- Irish Red Cross;
- Voluntary Emergency Services;
- Utilities; and
- Private Sector

Figure 14: Links between Major Emergency Plans and National and Other Plans



(Source: *A Framework for Major Emergency Management*, 2006)

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

It is the stated policy to develop Standard Operating Procedures (SOPs) for all identified risks and fields of cooperation. These are reviewed on an ongoing basis and available to the public.

SOPs are localised and agency specific however in the event of a major emergency the Framework document provides guidance. The SOPs for the local coordination centre that must be established in the event of a major emergency are standardised regardless of the type of emergency or location. The local coordination centre is established by the Principal Response Agency (PRA) in a designated building that it has already prepared SOPs for that centre with their inter-agency colleagues. Action cards are to be prepared and used to support the SOP, comprising pocket-sized single or multi-page laminated cards for all roles/posts/tasks in the set-up and operation of the centre. This includes principal Local Co-ordination Group members, Information Officers, Action Managers, Media Liaison Managers/staff, Log Keepers, Facilities Managers, security staff, IT support staff, and any others with functions assigned in local circumstances.

Additionally each principal response agency has SOPs which cover ordinary and extraordinary procedures as well as the inter-operability aspect of major emergency response. An Emergency Operations Plan (EOP) is a detailed document that outlines the personnel, roles, responsibilities, actions and processes to be followed in the event of an emergency. It may detail the resources available and when and where personnel will be called on to perform a strategy of mitigating actions to avert further deterioration of the situation and protect and stabilise the organisation and people affected by the emergency and it is the responsibility of each region to ensure that they have a working emergency plan.

4.2 Operations planning

- General framework for planning is set out in the Strategic Emergency Planning Guide published by the Government Task Force on Emergency Planning.
- In accordance with the principal of lead department responsibility, each department prepares its own emergency plans pertaining to their departmental remit.
- The most detailed operational planning for national emergencies is contained in the 'A Framework for Major Emergency Management'.
- Under the MEM Framework there are eight regions for civil protection purposes and each has a major emergency plan. There are 26 county councils and 5 city councils that make up

the local authorities who all have local plans for a major emergency. PRA also have emergency plans that cover their specific remit.

4.3 Logistics support in crises

- The core logistical support for crises is provided from within the resources of departments and agencies. However these may be supplemented:
- Private logistics providers may be contracted as and when required.
- Military logistical support is available as the Department of Defence oversees the OEP which is tasked with the coordination of major emergency management.
- There is no separate crisis logistics organisation in Ireland.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Ireland does not have a distinct national alerting system. It has never had a widespread siren system. It has developed warning procedures which are led by the relevant principal responder and distributed through all available channels, principally the broadcast media.

- Each principal response agency leads communications in their identified crises. This is supplemented by cross-government coordination. At times of significant national crises the central government communications operation is expected to play a major role.
- There have been no identified problems with getting the broadcast media to quickly carry warnings.
- Met Eireann (the Irish Met Office) is responsible for colour-coded weather warnings which conform to IMO standards.
- Technical infrastructure used to communicate with the public during a crisis or emergency include motorway alert messaging system and limited localised flood warning measures (voice messages and text alerts).



Figure 129: Info Management System
(Source: A Framework for Major Emergency Management, 2006).

5 Capabilities

5.1 Human resources

- Permanent disaster planning and management personnel 6 (Office of Emergency Planning).
- Capacity to mobilise personnel at a national level from other Departments by the Lead Department as and when required. Regional and Local levels mobilise personnel through emergency plans that are in place and scale up the response to draw in extra personnel.
- Involvement of volunteers, volunteer organisations, and specialised NGO personnel through planning, exercising and training with their related PRA or Local Authority.
- The Fire Services have 3,245 serving fire personnel of which 1026 are full time and 2039 are retained on a 24 hour basis across the 220 fire stations. 900 of these serving fire personnel are stationed with Dublin Fire Brigade.
- Limited spare capacity in hospitals is an identified weakness.
- An Garda Síochána has 14,500 garda and civilian personnel. In the last decade, the Garda Reserve has been introduced which has focused on community policing. The Gardai can also provide dog support, air support, mounted support and water support. An Garda Síochána have an agreement in place with the Police Service of Northern Ireland and a framework exists for collaboration and assistance when required.
- The Irish Coast Guard Service has responsibility for the national system of marine emergency management in Ireland's Exclusive Economic Zone (EEZ) and inland waterways. It is responsible for response to, and coordination of, maritime accidents which require Search and Rescue and Counter Pollution and Salvage operations. It also has responsibility for vessel traffic monitoring. It has three principal Marine Rescue Centres, 55 operational units (including both permanent and volunteer staff) and operates 6 medium-lift helicopters. It is an unarmed, non-security service. Operations in respect of maritime security, illegal drug trafficking, illegal migration and fisheries enforcement are coordinated by other bodies.
- Mountain Rescue Ireland has 365 members spread across twelve teams in Ireland. MRI is a 24 hour 999/112 emergency service provided by unpaid and voluntary teams.
- The Royal National Lifeboat Institution (RNLI) operates 44 lifeboat stations across the island of Ireland. It is an all-island organisation which is ultimately overseen from London though it has substantial local autonomy. It is a volunteer 24 hour 999/112 emergency service with 4,600 volunteers working as lifeboat crews and a further 3,000 supporting them as shore crew members which provide a 24 hour search and rescue service. The RNLI has specially trained volunteers on call for flooding emergencies who can deal with both urban and rural environments. In addition there are Community Rescue Boat services which are also volunteer based. The CRB and RNLI crews have both off-shore and inland waterway capabilities.
- Irish Red Cross's membership comprises 2,500 volunteers, supported by staff in Head Office in Dublin and three regional offices. Volunteers are organised in local units, with overarching

county and regional structures. The membership is country wide, with 111 units in twenty-five of the twenty-six counties in the state. The main relationship with the principal response agencies in major emergency response is as an auxiliary resource to the ambulance services. Subsidiary search and rescue and in-shore rescue units of the Irish Red Cross support An Garda Síochána and the Irish Coast Guard.

- The Civil Defence service is a statutory organisation of volunteers, which can provide a very important resource for use during major emergencies, in support of the principal response agencies. Civil Defence services, which include over 3,000 active volunteers, are structured on a county basis and are run by the Local Authorities. A Civil Defence Board, with a national Civil Defence Headquarters, oversees and assists the development of the Local Authority based Civil Defence organisation.
- There is a range of voluntary emergency services in Ireland which may be called on in an emergency under the Framework by one of the PRAs. These include; the Order of Malta Ambulance Corps, St John's Ambulance Service, Cave Rescue Teams, Search and Rescue Dog Associations, River Rescue Units, Community Inshore Rescue Units, Sub-Aqua Units, etc.

5.2 Materiel (non-financial) resources

- Crisis management centres have been identified in all eight regions. They are used from day-to-day as emergency call centres.
- Ireland has a total oil reserve stocks for 108 days of which 18 are for industry and 90 are for public consumption under the National Oil Reserves Agency (NORA) act of 2007. 36 days' worth of this oil is held abroad. Ireland is 92% import dependant for its energy needs¹²²¹
- Helicopters may be drafted in to assist in an emergency situation from An Garda Síochána which may be used for aerial surveillance; the Irish Coast Guard's six helicopters may provide medium-lift capability; The Defence Forces helicopters may be requested through previously agreed Memorandums of Understanding and Service Level Agreements; and the private sector.
- There are a number of organisations and agencies which may be called on to assist the principal response agencies in responding to major emergencies in addition to specialist national and local organisations, such as the Environmental Protection Agency(www.EPA.ie), the Health and Safety Authority (www.HSA.ie) and local port and airport authorities.
- An "Electricity Interconnection and Trading Agreement (16th June 1995)" exists between the Electricity Supply Board (ESB) and Northern Ireland Electricity (NIE) PLC in relation to sharing of power system reserve requirements, emergency support, coordination of outages of transmission plant and notification of certain system operation matters.

¹²²¹ Forfas; "The Irish Energy Tetralemma: A Framework for fuel choices in Ireland", Available from: http://www.forfas.ie/media/forfas130810-irish_energy_tetralemma-a_framework_for_fuel_choices_in_ireland.pdf.

5.3 Training

- National, local and departmental exercises are outlined in the MEM Framework documents
- Centralised specialist training for specific hazards occurs in each of the PRAs.
- Training of volunteers and NGO personnel occurs within these organisations and in collaboration with the PRA that they work with. Exercising takes place on a regular basis at local and regional level to reinforce training.
- Cross-border and multinational training activities occurs primarily within the Gardai.
- Certification systems are specific to the Principal Response Agency, Volunteer organisation or NGO. There is a great deal of mutual recognition, collaborative training and agreed priorities however there is no national certification partly due to the division of responsibility and proficiency between PRAs.
- National educational programmes focus on personal rather than public emergencies such as road safety, fire safety and winter ready campaigns.
- Specialised training programmes for high-level decision makers are provided as and when required to Government departments and run on a more regular basis for PRAs.

5.4 Procurement

5.4.1 Procurement regulation

Background

The public procurement process in public sector organisations is heavily decentralised. Public bodies perform the function independently within a framework of EU/national laws and national guidelines. The National Public Procurement Policy Unit (NPPPU) was established in the Department of Finance as a result of an April 2002 Government decision. Its role is to develop public sector procurement, policy and practice. The national procurement policy framework applies to:

- Central Government departments and bodies under their aegis and which are subject to audit under the Auditor General (Amendment) Act, 1993;
- Commercial and non-commercial state bodies;
- Local and regional authorities.

Public procurement policy and actions are focused on compliance with the relevant EU, WTO and national legal requirements and obligations. They must also comply with relevant procurement guidance issued by the Department of Finance.

EU Directive 2004/18/EC cover the procurement procedure of public sector bodies. Directive 2004/17/EC covers the procurement procedures of entities operating in the utilities sector. These Directives were published in OJ No L 134 of 30 April 2004 and are available on <http://europa.eu.int/eur.lexlen/index.html>, or the EU public procurement guidelines website <http://simap.eu.int> under 'Rules and Guidance'.

The procurement of defence and security materials in Ireland is regulated by Statutory Instrument No 62 of 2012 which transposed the European Award (Award of Contracts relating to Defence and

Security) regulations 2012. Procurement of utilities is regulated by Statutory Instrument No 50 of 2007 which transposed the European Communities (Award of Contracts by Utility Undertakings) Regulations 2007.

Three new Directives have been issued by the European Commission recently in respect of Public Procurement. These Directives are:

- 2014/23 - Award of Concession Contracts
- 2014/24 - Public Procurement
- 2014/25 - Procurement by entities operating in the water, energy, transport and postal services sectors

The three Directives, taken together, represent a reform of public procurement rules across the EU and require to be transposed into national law by April 2016. It is the Irish government's intention to meet this deadline.

The procedures for awarding public contracts are regulated by European Communities (Award of Public Authorities' Contracts) Regulations 2006. Procedures for awarding of public contracts can be by open, restricted and negotiated procedures. A competitive dialogue procedure is used where the contract is particularly complex or if the use of an open or restricted procedure would not allow the contract to be awarded. Negotiated procedure can be used with and without prior notice of contract. Framework agreements can be entered into with a single economic operator or several economic operators. Finally dynamic purchasing systems are also provided for in the regulations.

Adherence to procurement procedures is audited in all public bodies by the Comptroller and Auditor General and compliance is near universal. As such, all goods and services above the threshold are, except in exceptional circumstances, procured through public channels which are easily accessible to suppliers outside of Ireland.

Procurement for CM tools and services is done by individual agencies. Cross-border contracts are common but joint procurement is not.

Additional legislation would only be required for joint cross-border procurement where the conditions of the relevant Irish regulations could not be enforced or where the procured items would not be based in Ireland and under the control of the procuring agency.

5.4.2 Procurement procedures

Background

Procurement Thresholds

Contract notices below the EU threshold for publication on eTenders or by direct invitation

Amount	Type of Contract	Procedure
€0 - €24,999	Supplies or Services Contracts	Verbal quotes from competitive suppliers

€0 - €49,999	Works & Works Related Services	Quick Quote (direct invitation, not published on eTenders) See www.constructionprocurement.gov.ie See D/PER CWMF GN 2.3 Section 3.2
€25,000 - €125,000 €50,000 - €250,000	Supplies or Services Contracts Works & Works Related Services	Open Procedure Non-OJEU (See Dept. of Finance Circular 10/10) See D/PER CWMF GN 2.3 Section 1.2
€125001 – EU Threshold €250,000 – EU Threshold	Works, Supplies or Services Contracts Works & Works Related Services	Any Non-OJEU Procedure but usually Open or Restricted See CWMF GN 2.3 Section 1.2
Above EU Thresholds	Works, Supplies or Services Contracts	Any OJEU Procedure but usually Open or Restricted

(Source: eTenders.gov.ie)

The Official Journal of the European Union (OJEU) advertising thresholds came into effect in January 2014 and the main thresholds are listed below;

Works		
Contract Notice	€5,186,000	Threshold applies to Government Departments and Offices, Local and Regional Authorities and public bodies
Supplies and Services		
Contract Notice	€134,000	Threshold applies to Government Departments and Offices
Contract Notice	€207,000	Threshold applies to Local and Regional Authorities and public bodies outside the Utilities sector
Utilities		
Works Contracts / Prior Indicative Notice	€5,186,000	For entities in Utilities sector covered by GPA
Supplies and Services	€414,000	For entities in Utilities sector covered by GPA

(Source: eTenders.gov.ie)

5.5 Niche capabilities

- The Irish government and NGOs have a highly regarded capability in emergency humanitarian activities. This has not been deployed in Europe in the past but would be available to a major European disaster intervention.
- Due to its island location, Ireland has experience in marine rescue disciplines with a significant trained national volunteer corps in three organisations (Irish Coast Guard, RNLI, Community Boats Ireland). The RNLI is involved in international training programmes.

Resources

Legislative acts

None

Other normative acts

None (relevant policies are established by administrative decisions)

Official documents (white papers, strategies, etc.)

Business Continuity Planning for Severe Weather

Forfas; Available at: http://www.forfas.ie/media/Forfas04012012-Business_Continuity_Planning-English%20Version%20Updated.pdf

Cork City Major Emergency Plan; Available at:

<http://www.corkcity.ie/services/corporateandexternalaffairs/corkcitycouncilmajoremergencyplan/Cork%20City%20Council%20Major%20Emergency%20Plan.pdf>

Department of Defence Business Continuity Plan; June 2014.

Dublin City Major Emergency Plan; Available at:

http://www.dublincity.ie/sites/default/files/content//WaterWasteEnvironment/Major_Emergency_Planning/Documents/DCC%20MEP%202013.pdf

National Maritime Search and Rescue Framework:

(<http://www.dttas.ie/maritime/publications/english/irish-national-maritime-search-and-rescue-sar-framework>)

National Plan for Pandemic Influenza

(hse.ie/eng/services/Publications/corporate/Emergency_Management/Pandemicplan.html)

National Emergency Plan for Nuclear Accidents

(environ.ie/en/Environment/EnvironmentalRadiation/NationalEmergencyPlan/)

National Climate Change Strategy

(environ.ie/en/Environment/Atmosphere/ClimateChange/NationalClimateChangeStrategy/)

National Risk Assessment for Ireland 2012

(emergencyplanning.ie/media/docs/A%20National%20Risk%20Assessment%20for%20Ireland%20Published.pdf)

Draft National Risk Assessment 2014

Available at:

http://www.taoiseach.gov.ie/eng/Publications/Draft_National_Risk_Assessment_2014.pdf

Framework for Major Emergency Management (and appendices) (mem.ie/framework.htm)

Strategic Emergency Planning Guide: (<http://www.dttas.ie/maritime/publications/english/irish-national-maritime-search-and-rescue-sar-framework>)

Online resources (e.g. websites of key CM organizations)

Office of Emergency Planning (emergencyplanning.ie)

National Directorate for Fire and emergency management
(environ.ie/en/Community/NationalDirectorateforFireandEmergencyManagement/)

Environmental Protection Agency (epa.ie)

Office of Public Works (flood control) (flooding.ie, floodmaps.ie)

Health Service Executive (hse.ie)

Department of Foreign Affairs & Trade (aid division) (irishaid.ie)

Irish Red Cross (redcross.ie)

Irish Civil Defence (civildefence.ie)

Irish Meteorological Service (meteireann.ie)

Irish Aviation Authority (iaa.ie)

Irish Coast Guard (dttas.ie/maritime/english/irish-coast-guard-ircg)

Sustainable Energy Authority of Ireland (www.seai.ie)

Publications

Department of Defence; “Strategic Emergency Planning Guidance”, Available at:

<http://www.emergencyplanning.ie/media/docs/1SEPG.pdf>

Department of Defence; “A Risk Assessment for Ireland”, Available at:

<http://www.emergencyplanning.ie/media/docs/A%20National%20Risk%20Assessment%20for%20Ireland%20Published.pdf>

Department of Defence; “Be Winter Ready Handbook”, Available at:

<http://www.winterready.ie/pdfs/BeWinterReady-Web.pdf>

Department of Environment, Community and Local Government; “Keeping Communities Safe – A Framework for Fire Safety in Ireland”, Available at:

<http://www.environ.ie/en/Publications/Community/FireandEmergencyServices/FileDownload,32381,en.pdf>

Department of Transport, Tourism & Sport; “TRANSPORT INFORMATION GUIDE DURING SEVERE WEATHER 2013-2014”, Available at:

<http://www.dttas.ie/sites/default/files/publications/corporate/english/transport-information-guide-during-severe-weather-2013-2014/transport-media-info-guide-severe-weather-2012-2013-final.pdf>

MEM Project Team; “A Framework for Major Emergency Management”, Available at:

<http://www.mem.ie/memdocuments/a%20framework%20for%20major%20emergency%20management.pdf>

MEM Project Team; “A Framework for Major Emergency Management- Appendices”, Available at:

<http://www.mem.ie/memdocuments/a%20framework%20for%20major%20emergency%20management%20appendices.pdf>

MEM Project Team, “A Guide to Flood Emergencies”, Available at:

[http://www.mem.ie/guidancedocuments/A%20Guide%20to%20Flood%20Emergencies%20-%20Ver2%2011%20\(July%202013\).pdf](http://www.mem.ie/guidancedocuments/A%20Guide%20to%20Flood%20Emergencies%20-%20Ver2%2011%20(July%202013).pdf)

MEM Project Team, “A Guide to Local Coordination Centres”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20local%20coordination%20centres.pdf>

MEM Project Team; “A Guide to Managing Evacuation”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20managing%20evacuation.pdf>

MEM Project Team; “A Guide to Miscellaneous Issues”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20miscellaneous%20issues.pdf>

MEM Project Team; “A Guide to Seveso Obligations”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20seveso%20obligations.pdf>

MEM Project Team; “A Guide to Planning and Staging Exercises”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20planning%20and%20staging%20exercises.pdf>

MEM Project Team; “A Guide to Preparing a Major Emergency Plan”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20preparing%20a%20major%20emergency%20plan.pdf>

MEM Project Team; “A Guide to Risk Assessment in Major Emergency Management”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20risk%20assessment.pdf>

MEM Project Team; “A Guide to Undertaking an Appraisal” Available at:

<http://www.mem.ie/GuidanceDocuments/A%20Guide%20to%20Undertaking%20an%20Appraisal.pdf>

MEM Project Team; “A Guide to Working with the Voluntary Emergency Services”, Available at:

http://www.mem.ie/guidancedocuments/A%20Guide%20to%20Working%20with%20the%20VES_Jan%202011.pdf

MEM Project Team; “A Guide to Working with the Media”, Available at:

<http://www.mem.ie/guidancedocuments/a%20guide%20to%20working%20with%20the%20media.pdf>

MEM Project Team; “A Guide to Severe Weather Emergencies”, Available at:

<http://www.mem.ie/GuidanceDocuments/SevereWeatherEmergencies.pdf>

MEM Project Team; “Inter Agency Public Communication Plan Media Liaison”, Available at:

<http://www.mem.ie/GuidanceDocuments/Inter%20Agency%20Public%20Communication%20Plan%20Media%20Liaison.pdf>

MEM Project Team; “A Guide to Motorway & Dual Carriageway Emergencies - Strategic”, Available at:

<http://www.mem.ie/GuidanceDocuments/A%20Guide%20to%20Motorway%20&%20Dual%20Carriageway%20Emergencies%20-%20Strategic.pdf>

MEM Project Team; “A Guide to Motorway & Dual Carriageway Emergencies - Tactical”, Available at:

<http://www.mem.ie/GuidanceDocuments/A%20Guide%20to%20Motorway%20&%20Dual%20Carriageway%20Emergencies%20-%20Tactical.pdf>

MEM Project Team; “A Protocol for Multi-Agency Response to Flood Emergencies”, Available at:

<http://www.mem.ie/memdocuments/a%20protocol%20for%20multi-agency%20response%20to%20flood%20emergencies.pdf>

MEM Project Team; “A Protocol for Multi-Agency Response to Radiological/ Nuclear Emergencies”, Available at:

<http://www.mem.ie/memdocuments/a%20protocol%20for%20multi-agency%20response%20to%20radiological-nuclear%20emergencies.pdf>

MEM Project Team; “A Protocol for Multi-Agency Response to Land Based Marine Emergencies”, Available at:

<http://www.mem.ie/memdocuments/a%20protocol%20for%20multi-agency%20response%20to%20land%20based%20marine%20emergencies.pdf>

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<http://www.environ.ie/en/Community/NationalDirectorateforFireandEmergencyManagement/PublicationsDocuments/FileDownload,32382,en.pdf>

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<http://www.environ.ie/en/Community/NationalDirectorateforFireandEmergencyManagement/PublicationsDocuments/FileDownload,32381,en.pdf>

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<http://www.emergencyplanning.ie/media/docs/Guidelines%20for%20Coordinating%20a%20national%20level%20emergency%20crisis%20response%20Version%202%202013%2003.15.pdf>

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<http://www.emergencyplanning.ie/media/docs/revised%20annex%20to%20sepg%20-%20roles%20&%20responsibilities%20in%20emergency%20planning%2027%20may2010.pdf>

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http://www.seai.ie/Publications/Statistics_Publications/Energy_Security_in_Ireland/SEI_EPSSU_Security_of_Supply_Third_Report.pdf

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Available at: http://www.seai.ie/Publications/Statistics_Publications/Energy-Statistics/Energy-Statistics-1990-2013.pdf

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Expert interviews

In addition to the review of published material 7 interviews and 1 facility visit were conducted in the period July-September 2014. The organisations involved were:

Office of Emergency Planning (including visits to National Emergency Coordination Centre)

Cork City Council

Cork County Council

Dublin City Council

Dublin Fire Brigade



Driving Innovation in Crisis Management for **European Resilience**

ITALY

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: EOS (Klaudia Tani, Nicola Iarossi)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by Q4PR and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Italy is a parliamentary republic and is divided into 20 regions (first level administrative division), 110 provinces and about 8,100 municipalities. Provinces are administrative sub-divisions of regions and municipalities sub-divisions of the provinces. The 1948 Constitution¹²²² established a bicameral parliament (Chamber of Deputies and Senate), a separate judiciary, and an executive branch composed of a Council of Ministers (cabinet), headed by the President of the Council (Prime Minister). The president of the republic is elected for 7 years by the parliament sitting jointly with a small number of regional delegates. The President nominates the Prime Minister, who chooses the Ministers. The Council of Ministers – in practice composed mostly of members of parliament – must retain the confidence of both houses. The regions have exclusive legislative and executive power regarding any matters not explicitly reserved for national law. According to Article 116 of the Italian Constitution, five regions are granted with “Special Statutes” by Constitutional law¹²²³. Specifically, the regions of Friuli-Venezia Giulia, Sardinia, Sicily, Trentino-Alto Adige/Südtirol and Valle d’Aosta/Vallée d’Aoste assume “special forms and conditions of autonomy pursuant to the special statutes adopted by constitutional law”¹²²⁴ and according to Article 117 “legislative powers shall be vested in the State and the Regions in compliance with the Constitution and with the constraints deriving from EU legislation and international obligations”¹²²⁵.



Figure 16: Logo of the department of Civil Protection

In Italy civil protection is the “National Service”, institutionalised in 1992¹²²⁶; an integrated system which consists of all the local and central resources necessary for managing a calamity. Compared to other European countries, Italy has widespread risks throughout its territory and for this reason has developed an intervention system which starts from a local level and involves all administrations,

¹²²² See PART II of the Italian Constitution <http://www.constitutionnet.org/files/Italy.Constitution.pdf>. Published in the Official Gazette Dec. 27, 1947, no. 298 and amended in June 12th, 2013.

¹²²³ Italy Constitution, http://www.servat.unibe.ch/icl/it00000_.html Accessed December 7th

¹²²⁴ Article 116 of the Italian Constitution, http://www.senato.it/documenti/repository/istituzione/costituzione_inglese.pdf Accessed December 7th

¹²²⁵ Article 117 of the Italian Constitution, http://www.senato.it/documenti/repository/istituzione/costituzione_inglese.pdf Accessed December 6th

¹²²⁶ Civil Protection organization in Italy, http://www.central2013.eu/fileadmin/user_upload/Downloads/outputlib/Inarma_CompetenceList.pdf pg. 1

including the autonomous regions. The evolution of the legislative system and successive institutional set-up of the Italian crisis management (CM) system was driven by the numerous disasters which have struck the country and continue to pose an extraordinary challenge for the country. Lessons learned from these disasters have resulted in the implementation of new institutional arrangements yielding constant improvements in disaster preparedness, prevention, and response and recovery provisions. Civil society represents an active part of the National Service, particularly through the activity of the voluntary organisations.

The coordination of the national service and the promotion of civil protection activities are undertaken by the Department of Civil Protection (Dipartimento della Protezione Civile - DPC) under the office of the President of the Council of Ministers. The Department of Civil Protection is thus the operative arm of the President of the Council.

The Civil protection expenditures reach approximately 0.009% of the country's GNI.

Table of Contents

ITALY Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	925
Overview.....	926
Table of Contents	928
List of Figures	930
List of Abbreviations.....	931
1 Policy	932
1.1 Risk Assessment	932
1.2 Policy and Governance	938
1.2.1 Strategy scope and focus.....	939
1.2.2 Monitoring and analytical support to policy making; R&D	940
1.2.3 Policy for Prevention	941
1.2.4 Policy for Preparedness.....	941
1.2.5 Policy for Response	942
1.2.6 Policy for Relief and Recovery	943
1.3 Financing.....	944
1.3.1 Investing in preparedness	944
1.3.2 Investing in consequence management.....	944
1.4 Policy review, Evaluation & Organisational Learning	945
1.4.1 Post-Disaster Assessment.....	945
1.4.2 Departmental Lessons Learned systems	946
1.4.3 Centralised (national) Lessons Learned system	946
1.4.4 International exchange for Lessons Learned.....	946
1.4.5 Regular policy reviews.....	947
1.5 Resilience	947
1.6 Information sharing and data protection	948
1.6.1 Please describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection	948
1.6.2 Does the country/IO have registers/databases of volunteers?	948
1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. “crowd sourcing” and “crowd tasking”, “citizen as a sensor”)	949
2 Legislation	951

2.1	Crisis (emergency, disaster) management concept.....	951
2.2	General crisis (emergency, disaster) management law.....	951
2.3	Emergency rule	953
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	954
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	955
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	955
2.7	Legal regulations for international engagements of first responders and crisis managers	956
3	Organisation.....	957
3.1	Organisational chart.....	957
3.2	Organisational cooperation	968
4	Procedures	970
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	970
4.2	Operations planning.....	971
4.3	Logistics support in crises	971
4.4	Crisis communication to general public; Alert system; Public Information and Warnings .	973
5	Capabilities.....	976
5.1	Human resources	976
5.2	Material (non-financial) resources.....	977
5.3	Training	978
5.4	Procurement	978
5.4.1	Procurement regulation	978
5.4.2	Procurement procedures	979
5.5	Niche capabilities	980
	Resources	981
	Legislative acts	981
	Other normative acts	981
	Official documents (white papers, strategies, etc.)	982
	Online resources (e.g. websites of key CM organizations)	982
	Publications	983
	Expert interviews	984

List of Figures

<i>Figure 1: Logo of the department of Civil Protection</i>	<i>926</i>
<i>Figure 2: Frequency of disasters in Italy.....</i>	<i>932</i>
<i>Figure 3: Civil Protection Department</i>	<i>933</i>
<i>Figure 4: Italy's Volcanoes.....</i>	<i>934</i>
<i>Figure 5: Italy Voluntary Work Flyer</i>	<i>956</i>
<i>Figure 6: Organisational Chart of CM in Italy.....</i>	<i>958</i>
<i>Figure 7: DPC (Dipartimento Protezione Civile) Chart</i>	<i>959</i>
<i>Figure 8: Italy's main emergency first-responders units</i>	<i>961</i>

List of Abbreviations

CCS	Rescue Coordination Centre
CDI.COM.C	Command and Control Direction
CM	Crisis Management
COEMM	Operational Centre for Maritime Emergencies
COI	Commando Operativo Interforze – Operational Joint Command
COM	Mixed Operational Centre
COS	Municipal Operational Centre
DPC	Civil Protection Department
EC	European Commission
ENAV S.p.A.	Eute Nazionale Assistenza el Volo – Air Traffic Control Agency
EU	European Union
Euromed	Euro Mediterranean
GDP	Gross Domestic Products
ISPRA	Institute for Environmental Protection and Research
MATT	Ministro dell’Ambiente e Tutela del Territorio – Ministry of the Environment and Territory
NGO	Non-Governmental Organisation
SIN	Siti di Interesse Nazionale – Sites of National interest
Sit.I	National Situation Room

1 Policy

1.1 Risk Assessment

Risk prediction and prevention, relief to the affected populations, contrast and overcoming the emergency and risk mitigation are the civil protection activities identified by Law no. 225/92, which established the National Service. Protection of people and safeguard of the territory are the main objectives of these activities - which the DPC addresses, promotes and coordinates in collaboration with regional governments and the autonomous territories. Prediction activities- carried out with the participation of relevant scientific and technical bodies - aim to assess risk scenarios and, when possible, to give notice, monitor and supervise events and risk levels expected.

Key risks:

Italy has a high exposure to natural risks: earthquakes, floods, landslides, volcanic eruptions as well as fires. Natural hazards and man-made disasters contribute to a volatile environment.

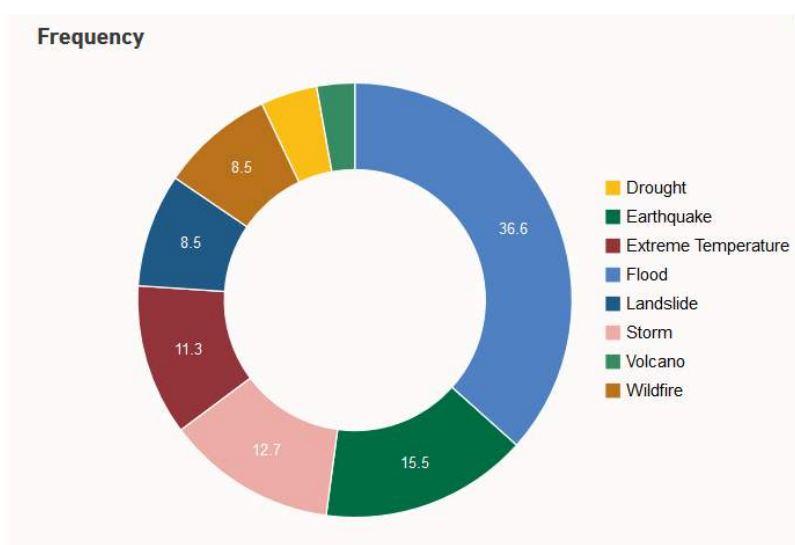


Figure 17: Frequency of disasters in Italy¹²²⁷

Seismic Risk

Italy is one of the countries in the Mediterranean with the highest seismic risk, due to its particular geographic position at the convergence of the African and Eurasian plates. The highest seismicity is concentrated in the central-southern part of the peninsula, along the Apennine ridge (Val di Magra,

¹²²⁷ EM-DAT (Feb. 2015) - The OFDA/CRED - International Disaster Database <http://www.emdat.be> - Université catholique de Louvain Brussels - Belgium

Mugello, Val Tiberina, Val Nerina, Aquilano, Fucino, Valle del Liri, Beneventano, Irpinia) in Calabria and Sicily and in some northern areas, like Friuli, part of Veneto and western Liguria. Only Sardinia is not particularly affected by seismic events.

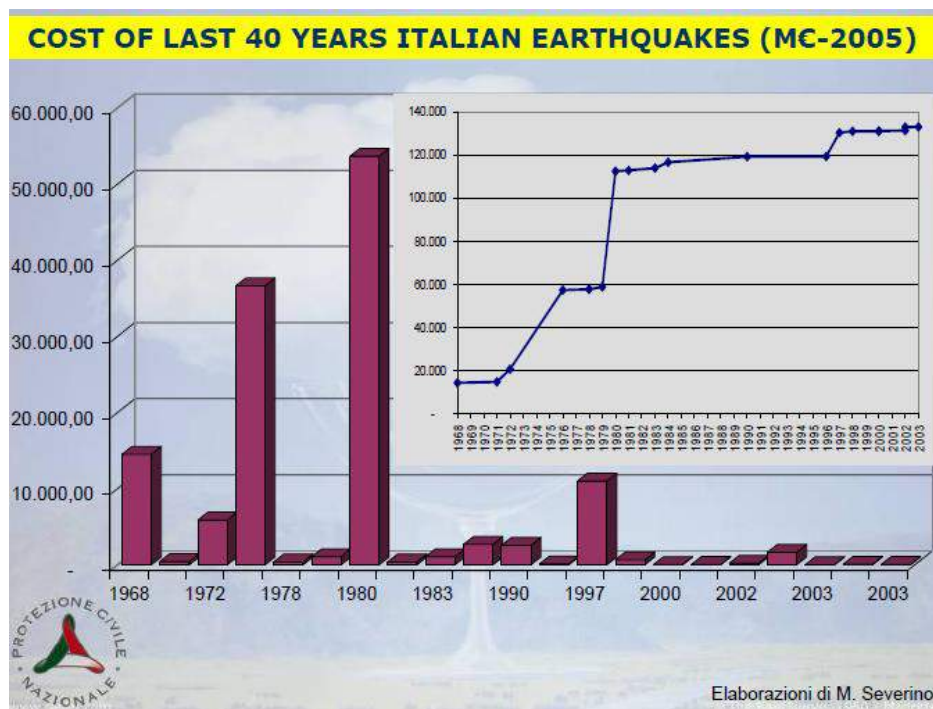


Figure 18: Civil Protection Department¹²²⁸

As shown in the Figure above, throughout 40 years, seismic risk in Italy has costed the country millions. Thus, requiring immediate action to enhance mitigation.

Volcanic Risk

In Italy volcanism owes its origin to wide ranging geological processes, involving the entire Mediterranean area and linked with the Euroasiatic and African tectonic plates converging together.

Even though less frequent and devastating than earthquakes, volcanic eruptions are still a great hazard for the densely populated zones in the Italian territory. At the moment Italy has two active volcanoes, Etna and Stromboli; as this report is been compiled, Mount Etna has erupted¹²²⁹.

¹²²⁸ French Association for Earthquake Engineering, www.afps-seisme.org/index.php/eng/content/download/1699/.../Calvi.pdf, accessed December 6th

¹²²⁹ The Guardian, Sky lights up over Sicily as Mount Etna's Voragine crater erupts, <http://www.theguardian.com/world/2015/dec/03/sicily-mount-etna-voragine-crater-erupts-lightning>, accessed December 10th



Figure 19: Italy’s Volcanoes¹²³⁰

Hydro-meteorological Risk

The terms hydro-meteorological and hydraulic risk are used to identify the phenomena triggered by “unfavourable weather conditions” and the effective or potential damage caused by water in general in liquid, solid form or underground.

Hydro-meteorological and hydraulic risks are strongly influenced by man-made actions. Density of population, the constantly shifting urbanization, abandonment of mountain areas, unauthorized buildings, continuous deforestation, the use of non-ecological agricultural techniques and the missing maintenance and upkeep of river beds and slopes have definitely worsened the hydrogeological instability and highlighted the fragility of the territory.

The most typical examples of hydrogeological phenomena comprise of thunderstorms, winds and sea storms, fog, snow and ice as well as heat waves, landslides, floods, coastal erosion, subsidence and avalanches¹²³¹. Italy for example suffers from flooding very often, which consequently creates landslides. At the moment of writing, the most recent flooding in Italy occurred on November 3rd, 2015, after a heavy non-stop rainfall of 2 days, at the southern of the country¹²³².

Tsunami Risk

Every coast of the Mediterranean Sea is exposed to tsunami risks due to the high seismicity and to the presence of various active volcanoes, both emerged and submerged. Tsunamis out of the coast

¹²³⁰ Italian Civil Protection Agency, Italy’s volcanoes, http://www.protezionecivile.gov.it/resources/cms/images/vulcani_italia_d0.jpg, accessed November 30th
¹²³¹ Italian Civil Protection Agency, Hydrological risks, http://www.protezionecivile.gov.it/jcms/en/rischio_idrogeologico.wp, accessed November 30th
¹²³² Floodlist, Southern Italy Hit by Deadly Floods After 2 Days of Heavy Rain, <http://floodlist.com/europe/southern-italy-calabria-sicily>, accessed December 8th

of Italy have been reported throughout the decades; none of them though had a large impact on the Italian society. Coastal areas like Eastern Sicily, Calabria, Puglia and Eolie archipelago are the ones mostly affected. Other ways in reaching Italian waters can always be the generation of high waves from a country that experienced an earthquake.

Fire Risk

About 30% of the Italian territory is made up of forests. Every year tens of thousands of hectares of those areas are burnt either by wilful or manmade forest fires; usually by neglect and carelessness. An estimation of 12% of the domestic forestry has been destroyed over the past thirty years¹²³³.

The consequences for the natural equilibrium are very serious and the times needed to restore the forestry and environmental ecosystem is nowadays becoming longer. Moreover, the changes attributed to climate change continue impacting the natural conditions of the soil. Damage caused by fires favour landslides coming along heavy rainfall, having even further impact on the natural strata of the soil.

The summer months are at the greatest risk, when drought, high temperatures and strong winds help evaporate a part of the water stored by the plants; causing a naturally favourable process for fires to break out and spread¹²³⁴.

Health Risk

Health risks are usually the consequence of other threats or disasters. Health risks emerge every time in critical situations possibly affecting human health as well as the natural environment. Difficult to foresee, it can be moderated when preventive actions are taken in advance. In these cases prevention could be the key into saving lives.

In the Italian case the Department of Civil Protection only engages with health risks in local communities which are unable to respond to such occurrence¹²³⁵.

In this connection the Civil Defence Department has outlined the “General criteria for organizing rescue work in catastrophes”¹²³⁶ published in 2001, followed by “General criteria for medicines and

¹²³³ Italian Civil Protection Agency, Forest Fires, http://www.protezionecivile.gov.it/jcms/en/rischio_incendio.wp

¹²³⁴ Italian Civil Protection Agency, Forest Fires, http://www.protezionecivile.gov.it/jcms/en/rischio_incendio.wp

¹²³⁵ Italian Civil Protection Agency, Activities http://www.protezionecivile.gov.it/jcms/en/attivita_sanitario.wp?jsessionid=84059FB01DD19E935DB110DC37C3F2EC

¹²³⁶ Italian Civil Defence Department, General criteria for organizing rescue work in catastrophes, 2001

medical devices to be kept in a first aid post (Pma II liv)”¹²³⁷ in 2003, by the “General criteria for psychosocial treatment in catastrophes”¹²³⁸ in 2006 and “Procedures and forms of medical triage”¹²³⁹ published in 2007.

Nuclear Risk

In reaction to the Chernobyl disaster of 1986 the Italian government had decided, via a referendum in 1987, to discontinue the use of nuclear energy. In addition, a national plan for nuclear emergencies was developed.

Despite the moratorium on nuclear power plants in Italy, nuclear threats remain. The Italian Civil Protection agency monitors ongoing power plants that are outside its territory, in a 200km radius; in case of an incident measures are taken at a national level. There are 13 plants surrounding Italy, namely in France, Switzerland, Germany and Slovenia.

The national plan in place for radiological emergencies, approved by Decree of the President of the Council of 19 March 2010, lays the measures necessary to deal with incidents that occur in nuclear power plants outside the Italian territory.

Environmental Risk

The Department of Civil Protection is responsible intervening in light of such environmental risks, and engaging in complex situations that range from waste to water pollution emergencies. Environmental risks also include air pollution and levels of dangerous substances in the environment.

Where land decontamination is concerned, the Department is always involved in the management of SIN - Siti di Interesse Nazionale (sites of national concern) – in other words, the areas identified in relation to site characteristics, to the quantity of and danger posed by pollutants, to the impact on the surrounding environment in terms of health and ecological risk, as well as damage to the cultural and environmental heritage. Legislation on the matter includes laws 462/98 and 388/2000, the Ministerial decree 468/01 and law 179/2002¹²⁴⁰. To date, SINs come to 57 and represent 3% of Italian territory of which 34 % is marine or inland waters, representing approximately 330,000 hectares of

¹²³⁷ Italian Civil Defence Department, General criteria for medicines and medical devices to be kept in a first aid post, 2003

¹²³⁸ Italian Civil Defence Department, General criteria for psychosocial treatment in catastrophes, 2006, accessed November 30th

¹²³⁹ Italian Civil Defence Department, Procedures and forms of medical triage, 2007, accessed November 30th

¹²⁴⁰ ISPRA, Contaminated Sites Management and Environmental Liability in Italy: Regulatory and Technical Aspects, http://www.iccl.ch/download/meeting_helsinki_09/A_Italy.pdf, accessed December 8th

marine area¹²⁴¹. The responsibility in terms of administrative procedures for the SINs falls on MATT - Ministero dell'Ambiente e della Tutela del Territorio (Ministry for the Environment and Protection of the territory), with the support of ISPRA (Institute for Environmental Protection and Research).

The sites/areas of national concern require urgent intervention and involve approximately 316 municipalities in all regions of Italy, with approximately 7 million inhabitants. Furthermore, based on the APAT 2003 annual, the sites/areas of “regional interest” are approximately 12,107 polluted or potentially polluted, of which 4,383 are registered in the “Registry of contaminated sites” (only 382 have been cleaned up).

The scale of pollution, on a spatial level, and the quantity of spills in these areas require urgent and costly interventions which must be tackled through the incidents ad hoc. For example, “2,400 tonnes of thick fuel in the capsized Costa Concordia pollutes one of the Mediterranean's most prized and pristine maritime reserves”¹²⁴². That was one of the worst environmental challenges faced by Italy in two decades.

An example of such an emergency is the decontamination of the Orbetello site, where - given the situation of serious environmental danger - the Ministry for the Environment asked the Ministry for the coordination of civil protection to adopt an order in accordance with law no. 22524 of February 1992¹²⁴³. This allowed for the implementation of urgent measures to activate operations necessary to reach objectives set by the Ministry for the Environment, specifically the technical-scientific commission; pursuant to the judgement of the area as one of high risk for an environmental crisis.

Over recent years, the Department has been engaged in the management of emergencies regarding bad management of solid urban waste, with attempts made to overcome and manage emergency situations in different Italian regions such as Campania, Calabria and Sicily through civil protection orders.

Industrial Risk

The presence of factories using or keeping chemical substances for their production activities in the territory exposes the population and surrounding environment to industrial risk. An industrial accident can in fact cause harm to population and territory.

¹²⁴¹ ISPRA, Italian Environmental Yearbook 2009, <http://www.isprambiente.gov.it/contentfiles/00006500/6503-tematiche-2009-key-topics1.pdf>

¹²⁴² Aloisi S., Italy risks worst environmental disaster in 20 years, <http://www.reuters.com/article/uk-italy-ship-environment-idUSLNE80J02Y20120120>

¹²⁴³ ISPRA, The Orbetello Site – Geological Features and Mining Activities, www.cprac.org/docs2/almaden2012_romano.pdf

The effects on human health in the event of exposure to the toxic substances released into the atmosphere during an accident vary, depending on the characteristics of the substances, relevant concentration, period of exposure and quantity absorbed.

Effects on the environment are linked with contamination of soil, water and atmosphere by toxic substances. Impact on material components, mainly corresponds to infrastructures, which most of the times are critical to society's rehabilitation. Thus, raising awareness in regards to these aspects is crucial for reducing industrial risk to the lowest possible levels, preventing harm to health and environment¹²⁴⁴.

1.2 Policy and Governance

In Italy the main responsibility for civil protection, is attributed to the "National Service". The National Service is an integrated system which includes all the local and central resources necessary for managing a calamity, as regulated by law 225/92¹²⁴⁵. Civil society represents an active part of the National Service, particularly through the activity of the voluntary organisations. Compared to the other European countries, Italy has widespread risks throughout the territory and for this reason has developed an intervention system which starts from a local level and involves all the administrations. The National Service includes the following in particular:

Components: they are the local and central administrations like Municipalities, Provinces, Regions and Ministries. All the subjects involved in civil protection events, for various reasons, like public authorities, institutes and groups of scientific research, even private institutions and organisations, associated citizens and groups of volunteers' professional rolls and boards are also members.

Operational structures: they are the organised State corps like the Fire brigade, the Armed Forces and the Forestry Commission, the Mountain Rescue Team, the Red Cross and the Health Service structures. Amongst these, the voluntary organisations of the civil protection service have taken on a role of particular importance and they have grown in all regions of the country in terms of numbers and of operational capacity.

The Civil Protection Department has a unique role in this process because it heads the National Service; directs and coordinates the activities and intervenes directly in the management of events that require extraordinary resources because of their extent and duration.

¹²⁴⁴ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹²⁴⁵ IFRC, Law and Regulation for the Reduction of Risk from Natural Disasters Law in Italy, <http://drr-law.org/resources/Italy-Desk-Survey.pdf>

Civil Protection activities: The system intervenes to provide relief to the population, to help overcome the emergency and aid a return to normality. The Mayor is the first person responsible for civil protection in the territory and provides relief to the population and coordinates amongst the different local structures and the volunteers.

If the Municipality cannot cope with the emergency alone, the provincial Council and the Government's territorial offices, that is the prefecture and the regional Council intervene by activating all the available resources for the areas affected by the calamity. In the most serious situations, central government intervenes: the Prime Minister has a direct responsibility in operating the Civil Protection Department.

The operation of the system is based on the principle of subsidiarity, according to which the nearest administration to the affected citizens intervenes first, while the superior administrative levels – Provincial council, Regional Council, Central Government – intervene if the administration is incapable of coping with the event within its own means. Emergency actions are planned according to the principles of the “Augustus method”, a simple, streamlined and flexible instrument¹²⁴⁶. This planning method predefines the operational structures as well as prepares a general civil protection plan and gives indications about procedures. What follows is basically a structural scheme prepared for every stage of a disaster¹²⁴⁷.

In day-to-day operations, the administrations are involved at all levels in predicting and planning actions of prevention and mitigation of risks. In this process, the scientific community, which is considered a member of the National Service, plays an essential role¹²⁴⁸.

1.2.1 Strategy scope and focus

The Department of Civil Protection, in collaboration with the regional governments and local autonomous bodies, orients, organises and coordinates civil protection projects and activities.

It coordinates activities in response to natural disasters, catastrophes or other events - “c” type events - which, due to their intensity and extent, must be tackled using special means and powers. In this case, the Prime Minister declares a state of emergency with a decree and identifies, through orders, the actions to be undertaken to manage the event.

On an operational level, the Italian Civil Protection Department:

¹²⁴⁶ Lumbroso et al. FIM FRAME: a method for assessing and improving emergency plans for floods, <http://www.nat-hazards-earth-syst-sci.net/12/1731/2012/nhess-12-1731-2012.pdf>

¹²⁴⁷ Mario Moiraghi, Origin, development and Method, pg 225

¹²⁴⁸ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

- Issues guidelines, aimed at regions, provinces and municipalities, to prepare and implement prediction and prevention programmes in relation to various risk scenarios;
- Prepares and implements emergency plans for type “c” events, in agreement with the pertinent regions and local organisations;
- Intervenes, at the request of the regional authorities, in extinguishing forest fires using the State aircraft fleet¹²⁴⁹.

It organises periodical drills for national emergency plans, with the objective of verifying the effectiveness of emergency plans and testing out procedures for managing disasters on facilities and the population.

It also promotes information activities for national scenarios, in collaboration with other institutions and associations as well as training and research activities regarding the prediction and prevention of natural and manmade risks. The training activities, organised in close collaboration with national organisations, are aimed towards voluntary organisations, at the “competent territorial bodies”, namely regions, provinces, mountain communities and municipalities as well as schools.

Acting within the Department is the National Functional Centre, which gathers data from the Regional Functional Centres and the Centres of Competence, used to monitor phenomena nationwide, and the coordination centre system, in the National Operations Room. The Department is also where COAU - the Unified Air Operations Centre, and COEMM - the Operations Centre for Maritime Emergencies both operate.

Responsibility for deciding Civil Protection policies is assigned to the President of the Council of Ministers, or to the Minister of the Interior. The DPC, which is the operative arm of the president of the Council of Ministers, has the mandate to initiate and coordinate all activities of the associated bodies and operational units of the “National Service of Civil Protection”. This accounts for prevention/preparedness activities as well as during disaster management operations¹²⁵⁰.

1.2.2 Monitoring and analytical support to policy making; R&D

Together with its substantial political power and its capacity to fully integrate scientific research and technological expertise, the DPC is a central body through which innovation, coordination and resources are streamlined. [1]

¹²⁴⁹ CALYPSO Project, Task4.1, <http://oceania.research.um.edu.mt/cms/calypsoweb/phocadownload/2.pdf>

The Memorandum of understanding with the aim of achieving the abovementioned was signed on 20/10/2011.

¹²⁵⁰ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

To fulfil its task of identifying the types of events, their geographical distribution and the probability of occurrence and risks, the DPC is involved in a structured system of collaboration with the scientific and research community through the “Commissione Grandi Rischi”¹²⁵¹. This Commission takes a multi hazards approach and deals with four phases of the emergency management cycle, forecasting, monitoring, surveillance and risk prevention of both natural and technological disasters.

Ministries, universities, public research institutes and public administrations combine forces with the DPC through different forms of co-operation, agreements, understandings and working teams, in order to define both prevention and forecasting measures for the different types of risk¹²⁵². For the fulfilment of the operational responsibilities of the Italian Civil Protection System, technical, scientific and industrial structures are involved with the aim of ensuring the necessary technical-scientific support¹²⁵³.

1.2.3 Policy for Prevention

The regions, assisted by the DPC’s National Research Community (also composed of Local and Regional authorities), have a role in providing guidelines to provinces to carry out risk prediction and prevention activities serving as the basis for the prefects’ emergency planning.

“Early warning, planning, training, dissemination of knowledge of civil protection, information to the population, drills, and application of technical regulations are the main instruments of civil protection for the prevention of territorial risks and are intended to prevent or limit damage in the event of an emergency”¹²⁵⁴.

However, their competences on the operational level remain limited. These tasks are reserved for the province and municipal level, whose mandate is to implement forecasting and risk prevention activities and assure that first emergency relief provisions are made¹²⁵⁵.

1.2.4 Policy for Preparedness

The Prime Minister issued on December 3rd, 2008 operational Guidelines for emergency management. The aim was to regulate the information flow between the different stakeholders involved. Activation and co-ordination of the components and structures of the Italian National Civil Protection Service (NCPS) described the organisational model of emergency management from a

¹²⁵¹ OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

¹²⁵² Interview with expert from the Italian Department of Civil Protection

¹²⁵³ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

¹²⁵⁴ Italian Civil Protection agency, <http://www.protezionecivile.gov.it/jcms/en/rischi.wp>

¹²⁵⁵ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

national perspective and contributed to the local civil protection responsibilities, guaranteeing critical operational co-ordination¹²⁵⁶.

Regions are required to conduct their own planning and initiate, organize and participate in Civil Protection activities organised at a regional level as well as supporting local organizations¹²⁵⁷.

According to the model adopted by each region, the Rescue Co-ordination Centre (CCS) of the province is activated. In the CCS there are representatives of the region, the prefecture, the province and the institutions, administrations and operational structures dedicated to the management of the emergency. The CCS promotes unified direction for operations and co-ordinated actions with those carried out by the mayors of the involved municipalities. If the model adopted by the region does not indicate clearly who exercises leadership of the CCS and there is specific agreement between the prefecture and the province in force, the task is assigned to the prefecture which has the duty to ensure the safety of the people and the goods.

Each region affected by a disaster, is subjected to the immediate activation and deployment of the regional counterpart – referring to the autonomous regions - and volunteer organisations, if any. The management of health care emergency operations, deployment of its technical experts to check the safety in buildings, damage assessment as well as evaluation of risks left and induced among others, are some of the actions that the CCS is responsible for. The region will, in case there is a need for extraordinary means and powers due to the actual needs in an area affected by disaster and on the basis of requests coming from the local institutions, submit a request for a declaration of State of Emergency¹²⁵⁸.

1.2.5 Policy for Response

During crisis situation well prepared and institutionalized coordination capacity and leadership for fast and immediate resource mobilization is required. The first person responsible for initiating and implementing civil protection activities is the mayor, who organises municipal resources according to pre-established plans made to cope with specific risks and disaster impacts in his territory of power.

However, in the case an event exceeds regional and local capacities, the government (Council of Ministers) is entitled according to the Prime Minister's decree to declare a State of Emergency in which support for provinces, regions and the assistance of peripheral state administrations will be guaranteed and co-ordinated by the prefects. Decision support for declaring a State of Emergency is

¹²⁵⁶ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

¹²⁵⁷ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹²⁵⁸ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

provided by the DPC on the national level, established under the direct authority of the Italian government and the prime minister's office.

The DPC is required to conduct an impact assessment within a very short time and to examine whether local resources are sufficient to efficiently manage a disaster. In case of required national resources the DPC takes over the responsibility for overall coordination of CM operations, while all concerned authorities at regional, provincial and municipal level perform their specific roles.

Intervention activities dealing with rescue operations are coordinated by the Operational Committee of the DPC including relevant institutions and their administrative units acting at a national and local level. They are carried out through a multi-level hierarchical organization represented by the Municipal Operational Centres (COC), the Mixed Operational Centres (COM) and Rescue Coordination Centres (CCS) at the provincial level, the Regional Operations Centres, and the Command and Control Direction (DI.COMA.C.) at the national level. Even though the DI.COMA.C. represents the national level, it is physically set up on the disaster site or close thereby. Furthermore, the DPC has institutionalised the National Situation Room (Sit.I.) at its premises, ensuring a 24 hours' presence of the DPC's main operational structures such as its permanent monitoring and control centre with regard to incidents occurring throughout the national territory¹²⁵⁹.

1.2.6 Policy for Relief and Recovery

Relief activities consist of a set of first assistance interventions to the affected populations. Finally, the emergency response comprises all the necessary steps to remove obstacles in order to resume normal life conditions in the affected territories¹²⁶⁰.

In 2009, Italy made use of the EUSF due to the damage caused by the earthquake in the Abruzzo region. Interestingly, the experience of aid provision and aid acceptance opened the eyes of Italian authorities for the need to improve its legal and institutional set-up on insurable damages, however, in the case of the Abruzzo region, the fund has not endangered or prevented the responsibility of the national authority in taking preventive actions. The money received by the fund, had more the role of refunding an extraordinary expenditure made by the Italian government. This case shows that the EUSF impact is not only providing immediate relief and recovery resources during and after emergency situations but also acts as well as engages the regions of the country into disaster preparedness activities, such as institutionalizing recovery structures and instruments¹²⁶¹.

¹²⁵⁹ ACRIMAS project : The Political and Legal Framework of EU Aftermath CM - ACRIMAS_D2-1

¹²⁶⁰ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹²⁶¹ ACRIMAS project : The Political and Legal Framework of EU Aftermath CM - ACRIMAS_D2-1

1.3 Financing

1.3.1 Investing in preparedness

Yearly civil protection expenditure is estimated at: 0.009% of GDP (EUR 142m)¹²⁶².

Starting with the adoption of the new regulation on the European Civil Protection Mechanism, adopted on 17/12/2013, Italy, like other EU Member States, is committed in the risk assessment process where activities comprised in the preparedness phase will be and evaluated. A clear picture of the financial investments for preparedness will be in case available only at the end of such a process. With the intense financial issues of DG ECHO, other measures of potentially creating a more flexible post-financing had to be considered. Thus,

The budget 2015 has now been adopted with payment appropriations and commitment appropriations at almost the same level. At the same time, the reinforcements in payments towards the end of 2014 have significantly reduced the backlog of unpaid bills, which is now in the order of EUR 135 million. Therefore, although the payments deficit has not been entirely solved, (and on current projections 2015 will close with a backlog of unpaid bills not dissimilar to 2014) the new budgetary context has allowed it to stabilise¹²⁶³.

1.3.2 Investing in consequence management

An important share of the State's annual budget is devoted to restoring damages incurred as a result of natural disasters. From 1999-2008, the State spent over EUR 35 billion in ad hoc, ex post disaster compensation. Although no dedicated disaster fund has been established, yearly expenses are progressively growing.

The compensation of disaster losses is handled on a case-by-case basis, whereby the Italian government intervenes in emergencies by providing ex-post financial aid and enacting ad hoc laws (so called emergency legislation). Following a disaster the local government of the affected area (town, province or entire region according to the extent of the disaster) may petition for a "Declaration of State of Emergency". If the Cabinet approves the proposal, it opens the way to an order specifying the financial amounts to be made available to the public for long-term reconstruction.

¹²⁶² CRISYS project – Summary of National meeting: Italy

¹²⁶³ http://ec.europa.eu/atwork/synthesis/amp/doc/echo_mp_en.pdf

These funds are primarily directed toward paying for reconstruction of public infrastructure and to contribute to the rebuilding of private houses. The area identified in the declaration may make claims for compensation from the fund for recovery measures through the region where it is located, and the President of the region delegates a body to monitor reconstruction works. The Department of Civil Protection acts as an intermediary in this process¹²⁶⁴.

In this way, major disaster recovery costs were in the past supported at National level, also using dedicated and time-limited taxes; however, the European Solidarity Fund has also been used to extend the scope of recovery financing.

In 2009, Italy made use of the EUSF due to the damage caused by the earthquake in the Abruzzo region in which 300 persons lost their life. The damage costs were estimated at € 10.2 billion¹²⁶⁵. The EC verified that the criteria defining a ‘major disaster’ were met (threshold value for EUSF activation is fixed for Italy at € 3.4 billion) clearly justifying European intervention. The aid helped to cover costs for emergency operations, temporary shelter, housing and school projects (approximately € 500 Million)¹²⁶⁶.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The large number of disasters Italy has substantially influenced current policy Centralizing the Italian Civil Protection System was seen as a “must” to manage disasters effectively¹²⁶⁷.

There is no formalized system or structure for evaluating systematically individual events and drawing lessons from incidents that could feed into proposals for change of policy. For example, after the San Giuliano earthquake the government considered the gap between scientific knowledge and its translation into risk mitigation tools to be unacceptable, and established a Working Group to obtain scientific advice on the possible upgrade of both seismic mapping and seismic code. The output of this effort was a by-law (n. 3274) issued by the Prime minister on general criteria for seismic mapping of the national territory and on seismic codes¹²⁶⁸. Meaning that best practices were eventually translated to knowledge with the aim of enhancing seismic mitigation.

¹²⁶⁴ OECD Reviews of Risk Management Policies: *Italy – Review of the Italian National Civil Protection System*

¹²⁶⁵ European Commission, The EU grants Italy nearly half a billion euros: the largest ever amount under the Solidarity Fund, http://europa.eu/rapid/press-release_IP-09-1785_en.htm?locale=en

¹²⁶⁶ ACRIMAS project : The Political and Legal Framework of EU Aftermath CM - ACRIMAS_D2-1

¹²⁶⁷ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹²⁶⁸ Dolce, M., Seismic safety of schools in Italy, <http://www.oecd.org/edu/innovation-education/33629104.pdf>, pg. 54, accessed December 24th

1.4.2 Departmental Lessons Learned systems

The national Civil Protection Service has developed and increased its capacity and capability by continuously learning lessons and gathering experience from past events, and with the support of legislation and ordinances that have been introduced over time for this purpose. One such event that provided many such lessons for emergency planners was the San Giuliano earthquake in 2002. It was found, for example, that:

- Even though different parts of Ital have been stroke with several earthquakes throughout the years, the culture of risk has faded away. Public awareness needs to be revived in such cases.
- The national building codes were obsolete. Authorities should act according to the latest available information with wide scientific consensus. Keeping norms unchanged allows for engineers and designers to forget the need for improvement.
- Buildings constructed in past are not necessarily safe enough. There is a need to conduct seismic assessment of the buildings and infrastructures that have a crucial role in emergencies or with relevant consequences in case of collapse.
- Due to the absence of any seismic awareness, local authorities were not ready to manage a seismic emergency. The relief model used by the national Civil Protection told local authorities what to do and how to do it, but did not check their preparedness¹²⁶⁹.

1.4.3 Centralised (national) Lessons Learned system

Disaster statistics and lessons that are informally drawn from events are not compiled in a dedicated data bank as part of the information and decision support system of the national Civil Protection Service.

1.4.4 International exchange for Lessons Learned

At the state there is no specific lesson learned program in place except the interchange within the DG-ECHO lesson learned mechanism relevant to operations where Italian first responders have been involved. In addition the Joint Research Centre of the EU, regularly publishes reports on lessons learned throughout Europe¹²⁷⁰.

¹²⁶⁹ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

¹²⁷⁰ JRC Report 2002, http://esdac.jrc.ec.europa.eu/ESDB_Archive/eusoils_docs/other/eur20558EN.pdf

During the Italian Presidency of the Council of the EU, Italy and Germany also initiated the EU-UN Cooperation in Crisis Management and Peace Operations, which allows for exchange of lessons learned and exchange of best practices at an international level¹²⁷¹.

1.4.5 Regular policy reviews

At the state level there are no specific mechanisms established for reviewing the policies adopted, evaluate their effectiveness and improve the policy process.

1.5 Resilience

The vision of the Italian Civil Protection Department is a “risk-aware and resilient society able to prevent disasters and to mitigate their impact”¹²⁷². The improvement of resilience in Italy is enhanced at a regional level, specifically, through the “Making the Cities Resilient” campaign¹²⁷³.

Italy seems to rely on improved preparedness mechanism for general society resilience augmentation. For example, private and public organisations managing critical infrastructure have business continuity management plans in place.

Specific tasks in National Crisis Protection Situations, in the event of an emergency are very extensive and include the supply of all information regarding the state of fixed line telephone and mobile phone services in the areas hit by emergency and the alternative networks supplied by each operator, highlighting the organisational and infrastructural impact as well as the identification of the corrective measures needed to guarantee the best possible connection continuity of the networks throughout the national territory, in order to avoid a domino effect on other types of infrastructure and to solve traffic congestion problems that are reported in real time at the operators’ coordination centres.

ENI, a major integrated energy company, among the other tasks, have to contribute to restore safety in the areas affected by the event and coordinate all activities for the immediate restoration of safety in the damaged infrastructures and power plants¹²⁷⁴.

¹²⁷¹ 2014 Italian Presidency of the Council of the EU, EU-UN Partnerships in Crisis Management and Peace Operations: Best Practices and Next Steps http://www.iss.europa.eu/uploads/media/Background_EU_UN_seminar_Rome_01.pdf, accessed December 11th

¹²⁷² United Nations Officer for Disaster Risk Reduction, <http://www.unisdr.org/partners/countries/ita>, accessed December 3rd

¹²⁷³ DPC, National progress report on the implementation of the Hyogo Framework for Action (2013-2015) http://www.preventionweb.net/files/44371_ITA_NationalHFAprogress_2013-15.pdf, accessed December 11th

¹²⁷⁴ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

The efforts to guarantee business continuity is also in the duties of GME and TERN, the major electrical power service companies, which are also in obligation to provide a contact centre for the spreading of useful information to the community with respect to the emergency and to contribute with support to the updating of the state of the plants¹²⁷⁵.

1.6 Information sharing and data protection

1.6.1 Please describe whether the country/ IO has adopted specific policies, measures or derogations from EU law with regard to data protection

The National Service quickly reacts to understanding the severity of a specific event. The collaboration of the scientific community allows for this swift response. Thereafter, the central and regional authorities, with a network they have developed, transmit real-time information between monitoring stations. This provides the autonomous regions and all stakeholders involved in the process with the capacity to anticipate and model events. Eventually, “the result is timely issuance of early warnings to local populations and rapid deployment of first responders”¹²⁷⁶.

1.6.2 Does the country/IO have registers/databases of volunteers?

The country has adopted a national list of voluntary organizations of civil protection.

Organisations wishing to participate in the activities of forecasting, prevention and intervention in sight or in the event of natural disasters and carry out training activities and training missions in the same scope must be registered on the national list of voluntary organizations of civil protection. According to the provisions of the Directive of the President of the Council of Ministers of 9 November 2012, the national list is composed of:

- a central list, and
- lists of the territorial force in the Regions and Autonomous Provinces.

The central list

This section of the national organizations that accommodates for operational characteristics and diffusion, are of particular importance in direct liaison with the Department of Civil Protection in the case of events of national importance.

Requirement for the inclusion in the list:

- The national coordinating structures of organizations established under Law 266/1991 spread to more regions

¹²⁷⁵ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

¹²⁷⁶ OECD, Review of the Italian national civil protection system, <http://www.oecd.org/futures/globalprospects/reviewoftheitaliannationalcivilprotectionsystem.htm>

- The national coordinating structures of the organizations of other component to mostly voluntary;
- Organizations with no regional organization, but able to perform specific functions deemed by the Department of Civil Protection of particular relevance and interest at the national level;
- The national coordinating structures of municipal and inter-municipal groups.

Applications for inclusion on the List Central received are numerous and, as established by the Directive, require a thorough audit. To this effect from August 1 2014 shall enter into force the first edition of the List, which will be integrated as the examination of further requesting organisations will be completed. For applicant organizations that are already listed in their respective regional lists, remains valid, with continuity, this registration.

The territorial lists

To intervene and operate in the case of activities and events of regional / local scope, organizations must be included in the list of local volunteer in their region or autonomous province.

The list is set up separately from the central register provided for by Law 266/1991 (framework law on volunteers). Organizations possessing the relevant requirements can subscribe to both. In the territorial lists can enrol:

- Voluntary organizations established under Law 266/1991 with local character
- Organizations otherwise established, but predominantly voluntary
- Local branches of the organizations, with national distribution, mentioned in the previous paragraphs
- Municipal and inter-municipal groups
- Organizations that collect most of the types mentioned above

Prior to the adoption of a Directive of November 9, 2012, the national list was made up of a single section that united organizations of national importance and those of a local nature. This list is no longer valid¹²⁷⁷.

1.6.3 Does the country have or plan to use data gathered from social media during crises? If so how? (e.g. “crowd sourcing” and “crowd tasking”, “citizen as a sensor”)

Italy has introduced, “the network #socialProCiv [...] establish a standard that, while respecting the autonomy of each actor, can help to make communication on social media in the field of civil

¹²⁷⁷ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

protection more recognizable, clear, useful and consistent to users”¹²⁷⁸. However, this is still in the making, as a working group has been established to test the feasibility of such a network.

This working group has met already three times, at the time of writing, and has produced three documents that would serve as guidelines for #socialProCiv. The first document identifies what is the role of #socialProCiv, and which groups it refers to. This is namely the Manifesto¹²⁷⁹. The second document, is more related to policy. Specifically, “agreement of clarity and the services that each member of the network #socialProCiv must prepare by following the indications”¹²⁸⁰. The third and last one is the guidelines on how to use #socialProCiv.

¹²⁷⁸ Italian Civil Protection Agency, #socialProCiv: the social network of civil protection, http://www.protezionecivile.gov.it/jcms/en/view_dossier.wp?prevPage=dossier&contentId=DOS52446

¹²⁷⁹ Italian Civil Protection Agency, #socialProCiv: the social network of civil protection, http://www.protezionecivile.gov.it/jcms/en/view_dossier.wp?prevPage=dossier&contentId=DOS52447

¹²⁸⁰ Italian Civil Protection Agency, #socialProCiv: the social network of civil protection, http://www.protezionecivile.gov.it/jcms/en/view_dossier.wp?prevPage=dossier&contentId=DOS52447

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In Italy, over the years responsibility regarding civil defence has progressively passed from the State to the local authorities; the main steps of this process were outlined in legislative decree no. 112 dated 1998 and the modification of Title V of the Constitution with constitutional law no. 3 dated October 18, 2001, with which the Civil Protection became a concurrent subject of legislation, thus of regional competence.

The Civil Protection and Crisis Management concepts have certainly evolved with time; this process is well described by the plethora of laws (see the following paragraph). Within these laws particular attention should be posted on the ones directly concerning the establishment of the National Service for Civil Protection which was established with law no. 225 dated 24 February 1992¹²⁸¹, later integrated and modified by law no. 401 dated November 9, 2001 focusing on the operational structure of the National Service¹²⁸² and law no. 152 dated July 26, 2005.

Taken as a whole, the legal instruments suggest opposite trends; a trend towards centralization and a trend towards decentralization within the Italian Civil Protection legislation reflect the struggle between higher or lower degree of autonomy among the regional, national level and local levels. The strong coordination role played by the Italian Department of Civil Protection and the power of the prime minister to declare a state of emergency illustrates the first trend revealing a more centralized system activated in extreme challenging emergency conditions. The fact that some provinces have evolved enormously their own regional system illustrates the later trend.

2.2 General crisis (emergency, disaster) management law

The following legislation constitutes the main pillars of the Italian CM legal framework:

¹²⁸¹ Italy Civil Protection Department, Voluntary work,
<http://www.protezionecivile.gov.it/jcms/en/volontariato.wp>, accessed December 10th

¹²⁸² Italy Civil Protection Department, Operating Structures,
http://www.protezionecivile.gov.it/jcms/en/strutture_operative.wp, accessed December 10th

- The "National Civil Protection Service", composed of all various kinds of actors at different administrative levels (compare figure 3-3), was institutionalized by Act no 225 adopted on 24 February 1992¹²⁸³.
- L.225/92 introduced a marked legal distinction between civil protection and civil defence and remains the legislative core of the Italian CM system: In the law a broader definition of "protection of civilians" extended the concept of Civil Defence aiming at protecting civilians during armed conflicts. Civil Protection is now understood as the series of actions and activities put forward by a country in order to protect human lives, goods, settlements and the environment from damages or from the danger of damages deriving from natural calamities, catastrophes and other disastrous events. Thus, Civil Protection was understood not only as a matter of post-emergency management but of forecasting and prevention as important pillars. Moreover, L.225/92 defined roles and responsibilities of and between different governmental and non-governmental executive bodies in the context of decentralization¹²⁸⁴. Competences are shared between the administrative national, regional, and community level as well as the research community, voluntary organizations and private entities. Although, the law provided the national government (cabinet) with the power to declare a "State of Emergency", this specific law was not intended to centralise civil protection actions to the State. According to the principle of subsidiary, CM-decisions are made and interventions are implemented only at a higher administrative level, if subordinate entities are unable to manage a crisis situation. The mayor (community / municipality) was appointed as the highest level of authority during a crisis and the person that would pass on the responsibility to higher authorities in case the incident required specialised actions.
- Based on the provision in the constitutional law of 16 March 1997 (L 15.3.1997 n. 59) on decentralization, the legislative Decree 112/98 has renewed the distribution of public service provision, tasks and responsibilities.
- In 2001 (L. Constitutional 18.10.2001 n. 3), a constitutional reform increased the legislative and executive power of the regions and regional governments were given the opportunity to develop their own Civil Protection structures; that was also in accordance to the autonomy of certain regions, as mentioned above.

¹²⁸³ Dpr 21 settembre 1994, n. 613: the regulations concerning the participation of voluntary organizations in the activities of civil protection (source in Italian), http://www.protezionecivile.gov.it/jcms/en/view_prov.wp?facetNode_1=f4_4_3&prevPage=provvedimenti&atcode=f4_4_3&contentId=LEG21155

¹²⁸⁴ ACRIMAS project, D2.1 Report on Current CM Framework http://www.acrimas.eu/attachments/article/5/D2.1_ACRIMAS_Report_on_CM_Framework_v2-1.pdf

- Also in 2001, law 343 and 401 significantly changed the operational-coordination structure of Civil Protection. Specifically, “the prime minister, in collaboration with the regions and local communities, is responsible for the planning of operational emergency guidelines, forecasting and prevention programmes, rescue programmes and the coordination of their implementation”¹²⁸⁵.
- In 2002 law 245 transferred full authority to the Prime Minister to initiate CM activities during an emergency situation, and the level of emergency is defined by the risk level¹²⁸⁶. In this specific decree, extensive disasters are not properly defined.

2.3 Emergency rule

In Italy, for the purposes of civil protection, calamitous events are classified in three different types. For each event, on the base of its extent, intensity and capacity of the civil protection response, the relevant civil protection levels are identified which should take the direction and coordination of interventions:

- type a (municipal level);
- type b (provincial and regional);
- type c (national).

The state of emergency may be declared as "imminent" and not just at "the occurrence" of a natural disasters, or related human activities that, for intensity and extent must be tackled with immediate intervention with extraordinary powers and means (Decree law n. 59 of 15 May 2012, converted into Law n. 100 of 12 July 2012).

For events "type c" the Council of Ministers shall act the state of emergency, proposed by the Chairman of the Board, or, by proxy, of a Minister with the portfolio or the Undersecretary of State at the Presidency of the Council of Ministers Secretary of the Board. The request may also come from the President of the Region concerned. Until the entry into force of Decree-Law n. 59/2012, converted into Law n. 100/2012, the declaration of a state of emergency was accomplished by a decree of the President of the Council of Ministers.

The duration of the state of emergency, in accordance with article 10 of Law n. 119 of October 15, 2013, may not exceed 180 days and may be extended up to an additional 180 days, with further deliberation by the Council of Ministers. In fact, standing to the art. 2, (Italian Law 225/92), mentions that, events with an intensity and extent that require extraordinary means and power, the Council of

¹²⁸⁵ ACRIMAS project, D2.1 Report on Current CM Framework
[http://www.acrimas.eu/attachments/article/5/D2.1 ACRIMAS Report on CM Framework v2-1.pdf](http://www.acrimas.eu/attachments/article/5/D2.1%20ACRIMAS%20Report%20on%20CM%20Framework%20v2-1.pdf)

¹²⁸⁶ OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

Ministers, approves the proposal for state of emergency by the Prime Minister, and decides duration and territorial coverage

Interventions to deal with the emergency will be defined by ordinances notwithstanding the provisions of the law, but within the limits and according to the criteria indicated by the declaration of a state of emergency and in accordance with the law.

The orders are issued by the Head of the Department of Civil Protection, unless otherwise determined by resolution of the state of emergency by the Council of Ministers. The implementation of the ordinances is handled, in any case, by the Head of the Department. Before the law 100/2012, orders were issued by the President of the Council of Ministers or by a Minister appointed by him. The enactment requires the prior acquisition of consent from territorial regions concerned.

At least ten days before the expiration of the state of emergency is issued, an order of the Head of Department identifying the respective public administration in the ordinary status of government, and regulates the governing replacement for the activities to definitively overcome the difficulties caused by the emergency.

If an emergency occurs, even before the declaration of a state of emergency, the President of the Council of Ministers may order the involvement of national operational structures, on the proposal of the Head of the Department of Civil Protection and heard the President of the region concerned. In these cases, assessed in relation to the serious risk of impairment of the integrity of human life, the coordination is entrusted to the Head of the Department of Civil Protection. (art. 3 of Decree-Law n. 245 of 2002 converted into Law 286 of 2002)¹²⁸⁷.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Based on the provision in the constitutional law of 16 March 1997 (L 15.3.1997 n. 59) on decentralization the legislative Decree 112/98 has renewed the distribution of public service provision, tasks and responsibilities of the government between the different levels of government towards a stronger decentralization of power and tasks to the regions and local authorities (provinces and municipalities). Civil Protection power has been transferred from the prefects, chief representatives of central government in the provinces, to the regional and provincial governments.

Also in 2001, the additional laws 343 as well as 401 have changed the operational-coordination structure of Italy's Civil Protection Services. The Prime Minister, in collaboration with the regions and

¹²⁸⁷ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

local communities, is responsible for the planning of operational emergency guidelines, forecasting and prevention programmes, rescue programmes and the coordination of their implementation.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In 2001 (L. Constitutional 18.10.2001 n. 3), a constitutional reform increased the legislative and executive power of the regions to stimulate regional and local institutions' competence and responsibilities while at the same time safeguarding the state's role of overall guidance and coordination. Within the frame of the reorganization of Italy's administrative structure, the regions were also required to improve their Civil Protection service by transferring operational CM responsibilities to the local level and supporting and promoting local CM-organizations. Thus, regional governments were given the opportunity to develop their own Civil Protection structures according to the requirements of their specific territorial and risk specificities¹²⁸⁸.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

With,

the floods of Florence in 1966 and the Friuli and Irpinia earthquakes above all. A great spontaneous mobilisation of citizens made it clear that the solidarity of the people was by no means lacking, but an organised public system which knew how to employ them and get the best out of them was required. Since then the voluntary organisation of the Civil Protection Department has blended religious and non-religious bodies and guarantees the right to receive professional relief¹²⁸⁹.

¹²⁸⁸ ACRIMAS project, D2.1 Report on Current CM Framework
http://www.acrimas.eu/attachments/article/5/D2.1_ACRIMAS_Report_on_CM_Framework_v2-1.pdf
¹²⁸⁹ Italy Civil Protection Department, Voluntary work,
http://www.protezionecivile.gov.it/jcms/en/volontariato.wp?facetNode_1=f1_5



Figure 20: Italy Voluntary Work Flyer

In 2001 (L. Constitutional 18.10.2001 n. 3), a constitutional reform not only touched vertical subsidiarity power relations but also horizontal relationships between the public and private sector, by increasing the role of associations and business enterprises during high level coordination activities between Civil Protection authorities, volunteer organizations and critical infrastructure operators.^[4]

2.7 Legal regulations for international engagements of first responders and crisis managers

In the event of natural disasters or serious events abroad, the Civil Protection Department may define the measures, signed by the President of the Council of Ministers, for the declaration of a state of emergency and to cope with the disaster (art. 4 of Law n. 152 of 2005)¹²⁹⁰.

¹²⁹⁰ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

3 Organisation

3.1 Organisational chart

Civil protection in Italy is not a structure, but an integrated system that allows the coordinated use of all available state and private resources. The operational structure set-up in case of major disasters takes into account the administrative organisation of the country.

The general mission of national civil protection is, both at central and local levels, to protect the lives, goods, properties and environment from damage or threats caused by natural and technological disasters and other calamities.

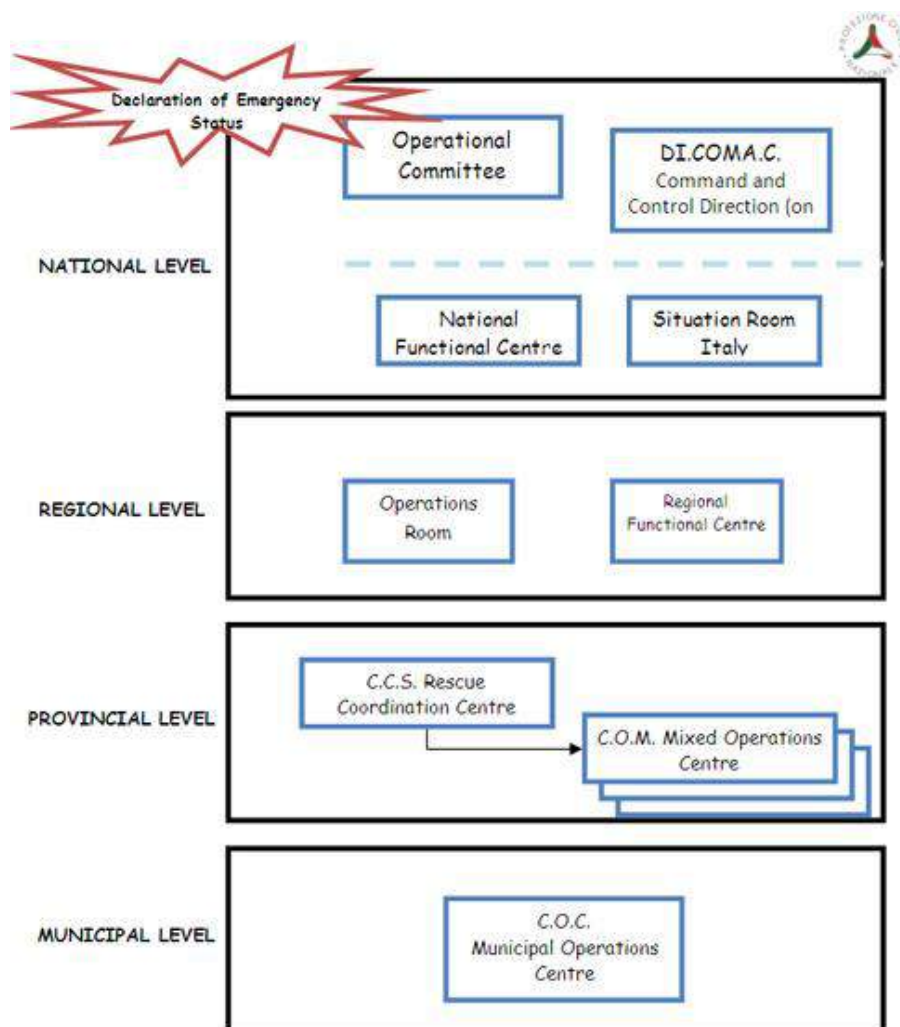


Figure 21: Organisational Chart of CM in Italy

The "National Service of Civil Protection" was institutionalised by Act no 225 adopted on 24 February 1992. As stated in its first article, the Act is drawn up by the state administrations, both central and peripheral, the regions, the provinces, the municipalities and the mountain communities, the national public and local institutions and all other institutions or organisations, both public and private, present on the national territory. Together, they constitute the National Service of Civil Protection with designated components and operational structures.

The responsibility to decide civil protection policies is assigned to the President of the Council of Ministers, or to the Minister of the Interior appointed by him.

The coordination of the national service and the promotion of civil protection activities are undertaken by the Department of Civil Protection (Dipartimento della Protezione Civile - DPC) under the office of the President of the Council of Ministers. The Department of Civil Protection is thus the operative arm of the President of the Council, when it comes to coping with the protection of the country's people and goods.

The DPC is managed by a Head of Department and is divided into eight main offices, where each one is managed by a General Director. Each office is furthermore divided into two or more "Services" carrying out specific tasks¹²⁹¹.

¹²⁹¹ DG ECHO, <http://ec.europa.eu/echo>

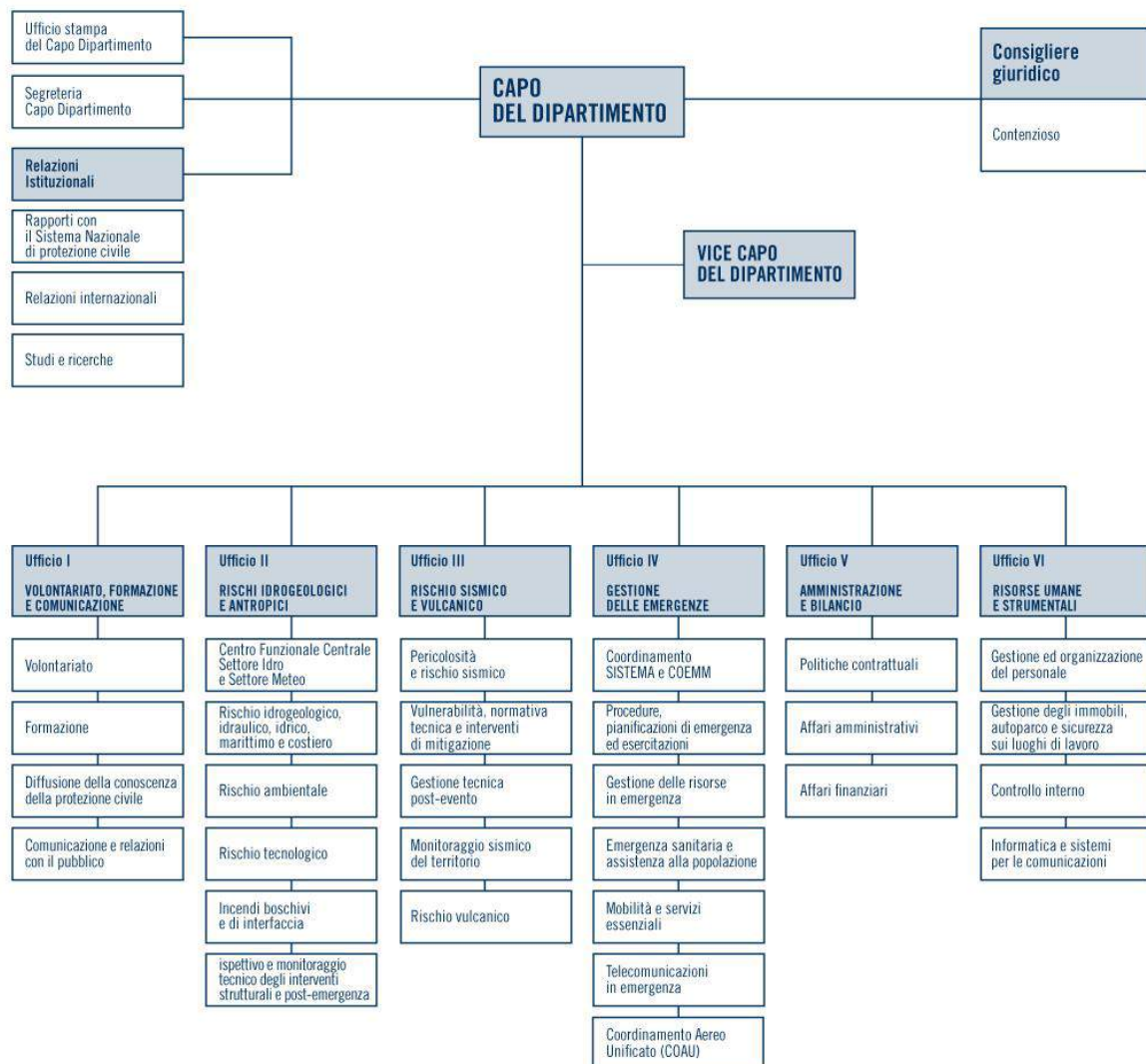


Figure 22: DPC (Dipartimento Protezione Civile) Chart

The Department is divided in six offices and 34 services. The following directly report to the Head of Department: Vice Head of Department, Legal Advisor, Press Office, Secretary of the Head of Department and Institutional Relations Office and a manager of first category with consultancy tasks of study and research.

Besides the personnel structures, the Department is composed of further six offices, divided into services: Office I - Voluntary work, Training and Communication, Office II - Hydrogeological and Anthropical Risks, Office II - Hydrogeological and Anthropical Risks, Office IV - Emergency Management, Office V - Administration and Budget, Office VI - Human and Instrumental Resources¹²⁹².

- Interdepartmental (inter-ministerial) emergency and disaster management authority

¹²⁹² Italy Civil Protection Department, Organizational Chart, http://www.protezionecivile.gov.it/jcms/en/organigramma_ist.wp. Please note that the chart is not available in English, and that the overview of the departmental structure has been extracted by the official website.

The inter-ministerial coordination in case of national emergencies takes place primarily within the Operational Committee, which meets under the direction of the head of the Department of Civil Protection.

- National permanent emergency and disaster management unit(s)/ formations; first responders

Act 225/92¹²⁹³ recognises as part of the National Service of Civil Protection, being a "national operational structure" the institutional components such as:

- the National Fire-Fighters Corps,
- the armed forces,
- the police force,
- the National Forestry Corps,
- the Coast Guard.

In fact, the "Civil Protection National Service" is composed of different operational units that are coordinated centrally by the DPC. Operational units include: The National Fire- Fighters Corps, police and the armed forces, State Forest Corps, Italian Red Cross, National Health Service, National Alpine Rescue Corps, volunteer forces, state administrations, executive powers of the regions, provinces and municipalities, technical-scientific experts and private institutions and organizations. These operational units belong to, according to their tasks and responsibilities, to different line ministries and other public authorities and private entities.

The illustration below shows the institutional set-up of the "Civil Protection National Service"¹²⁹⁴.

¹²⁹³ Presidenza del Consiglio dei Ministri – Dipartimento della protezione civile Training workshop on Multi - Hazard Early Warning Systems Italy, <https://www.wmo.int/pages/prog/drr/events/Pula/Presentations/MHEWSItaly1.pdf>

¹²⁹⁴ ACRIMAS project, D2.1 Report on Current CM Framework [http://www.acrimas.eu/attachments/article/5/D2.1 ACRIMAS Report on CM Framework v2-1.pdf](http://www.acrimas.eu/attachments/article/5/D2.1%20ACRIMAS%20Report%20on%20CM%20Framework%20v2-1.pdf)

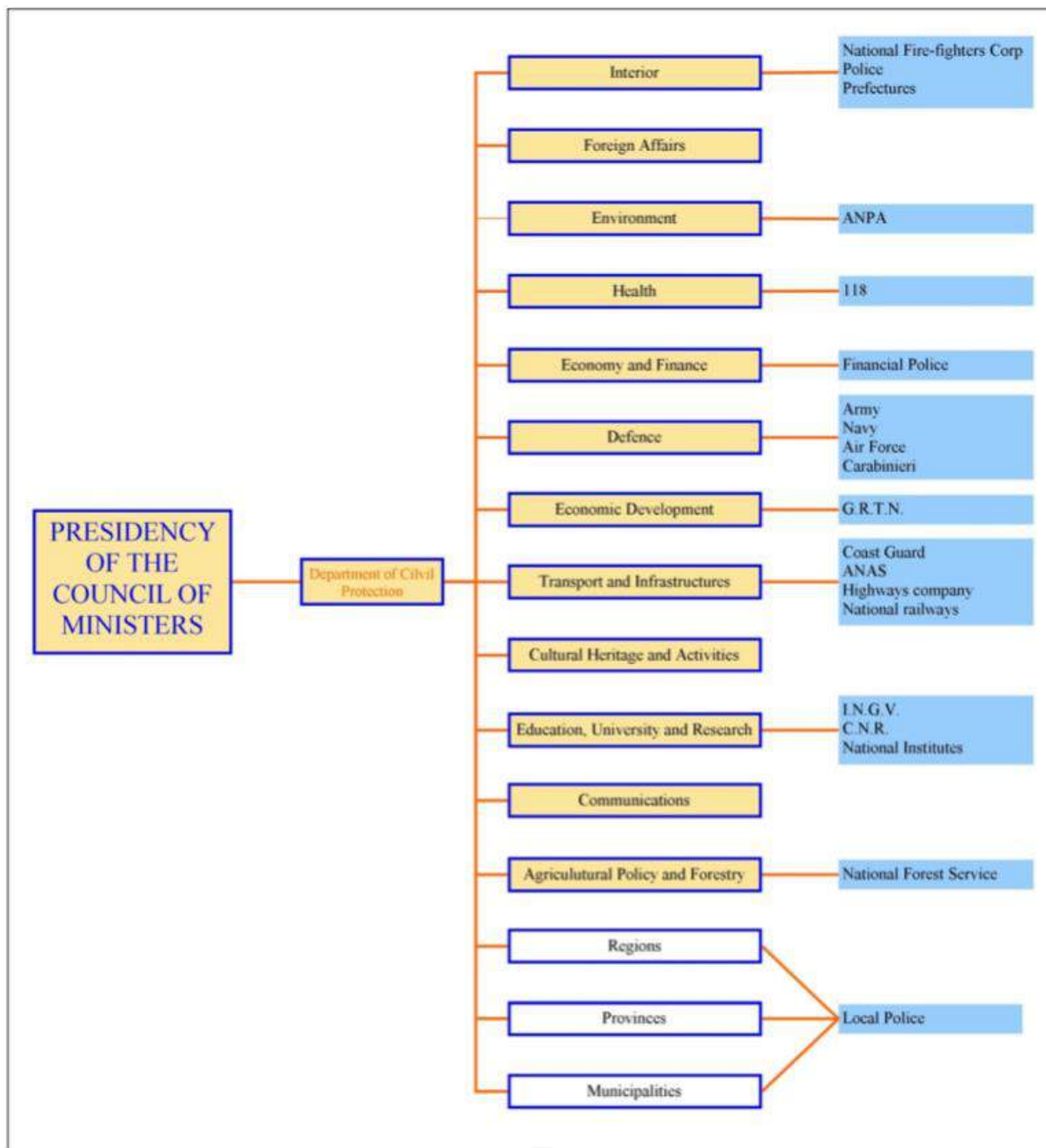


Figure 23: Italy's main emergency first-responders units

- Planned/ anticipated use of specialised military assets

Civil-Military Cooperation is fully implemented in Italy. The Armed Forces are fully integrated in the National Civil Protection Service and arrangements are in place for planning and implementing cooperation on a daily basis. The Italian Armed Forces also participate in Civil Protection operations conducted abroad¹²⁹⁵.

¹²⁹⁵ CRISYS project – Summary of National meeting: Italy

Representatives of the COI (Comando Operativo Interforze) are integrated ordinarily into the DPC Operational Rooms at central and local level, as well as into the Operational Committee which decide at high level the deployments of specific resources. The use of specific financial plan for the emergency in the Armed Forces will support the interventions which will be actuated, at operational level, following, in the most of cases, standard procedures which could be consider part of a sort of operational plan.

- **Departmental emergency and disaster management arrangements**

The Departmental emergency and Disaster bodies must ensure the implementation of the established intervention activities with respect to the specific competences and procedures of these components and structures.

In particular the representative of the:

National Fire Brigades Corps

Immediate actions

- a) provide detailed information regarding the consequences of the event for the purpose of making a first estimate of fatalities, the number of injured persons, the population in need of assistance and the accessibility to the area affected by disaster;
- b) provide information regarding the human resources, logistics and technology available and ready for immediate use on site, in particular resources for search and rescue activities, including those already deployed;
- c) provide information about additional resources available for potential use, identifying their location, characteristics, time frame for action and instructions for use;
- d) make available the mobile operational centres of the fire brigades as first co-ordination headquarters in situ;
- e) identify the co-ordinators of the urgent technical rescue operations on site.¹²⁹⁶

Within 12 hours

- a) make the personnel of the fire brigades available for safety control of strategic buildings and the structures hosting the operational and coordination centres of the rescue and relief system supported by local technical experts;
- b) guarantee the service of its staff at the operational and co-ordination centres in disaster areas¹²⁹⁷;

Within 24 hours

¹²⁹⁶ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

¹²⁹⁷ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

- a) supply the required operational and logistic support for the urgent accommodation needs of the affected population;
- b) provide information concerning the interventions carried out to secure the safety of structures and infrastructures¹²⁹⁸;

Police forces

(the national Police, the Carabinieri, the Revenue Guard Corps and the national Penitentiary Police and the national forest Corps are represented in the operational Committee)

Immediate actions

(through the direct co-ordination of the Department of Public Security, for general matters, or the prefects for local matters)

- a) provide detailed information regarding the consequences of the event for the purpose of making a first estimate of fatalities, the number of injured persons, the population in need of assistance and the accessibility to the area affected by disaster;
- b) provide information regarding the human resources, logistics and technology available and ready for immediate use on site, in particular resources for search and rescue activities;
- d) propose the possible use of additional resources, by indicating their location, characteristics, time frame for action and instructions for use;
- e) the Police administration head of the affected province is responsible of identifying the co-ordinator of public security and safety actions in the province;
- f) adopt public security and safety competence measures¹²⁹⁹;

Within 12 hours

- a) guarantee in collaboration with the health authorities the activation of the necessary scientific technical competences and experts for the procedures needed to identify bodies and ensure the presence of specialized staff at the operational and co-ordination centres activated in the affected area;
- b) ensure the presence of staff from the Police forces at the operational and co-ordination centres active in the affected area.

Within 24 hours

- a) guarantee safety in the base camps hosting the rescue teams, the population's shelter areas and the operational and co-ordination centres activated in the affected area.

¹²⁹⁸ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

¹²⁹⁹ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

Harbour Offices of the Coast Guard

Immediate actions

- a) provide detailed information regarding the consequences of the event for the purpose of making a first estimate of fatalities, the number of injured persons, the population in need of assistance and the accessibility to the area affected by the event;
- b) provide information regarding the human resources, logistics and technology available and ready for immediate use on site, in particular resources for search and rescue activities;
- c) plan the potential deployment of additional resources, identifying their location, characteristics, time frame for action and instructions or modalities for use;
- d) identify the co-ordinators of rescue operations at sea;
- e) provide information on the operability of harbour and maritime infrastructures in the areas affected by disaster;
- f) activate naval resources, also the ones provided on a private basis, supplied autonomously or jointly with other administrations, institutions or structures, for the inflow of relief operators and to guarantee a timely evacuation and treatment and transfer of injured victims (meDevaC) to safe areas or hospital facilities which can provide temporary shelter areas for the population;
- g) dispose the issuing of avURnav in order to provide restrictions of the areas at risk and to facilitate rescue and relief operations¹³⁰⁰;

Within 12 hours

- a) plan the necessary activities to survey and evaluate the damage to the bunkering ports and coast and marine industrial plants;
- b) identify the harbour infrastructures which can be utilized as gathering areas for the rescue teams and for the means and equipment;
- c) ensure the presence of its staff at the operational and co-ordination centres active in the affected area;

Within 24 hours

- a) provide all the information regarding the survey of damage to the marine environment and the necessary measures to guarantee the protection and safety of the marine areas under environmental protection and the equipment and production plants and companies involved in the **event**. [5]

- Other national civil service organisations

¹³⁰⁰ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

In the following is described the commitment and arrangement for the most relevant civil service organisation active in the emergency situation:

Italian Red Cross

Immediate actions

- a) participate in gathering detailed information regarding the consequences of the event for the purpose of drafting a first estimate of the casual ties, the number of injured persons and the population in need of assistance;
- b) provide information regarding the human resources, logistics and technology available and ready on site;
- c) plan the potential deployment of additional resources, identifying their location, characteristics, time for action and modalities for use;
- d) ensure participation in rescue and relief operations and providing assistance to the injured population¹³⁰¹;

within 12 hours

- a) ensure the presence of its personnel at the operational and coordination centres activated in the area;
- b) guarantee participation in setting up and co-ordinating the base camps hosting the resources for relief operations and shelter areas for the population;
- c) ensure participation in providing assistance to the population in particularly sensitive groups of the population;
- d) activate its permanent structures with the purpose of guaranteeing, within its capacity limits, assistance with the sheltering of the evacuated population hit by the event;
- e) propose the potential deployment of expert teams for both special rescue operations and assessing the specific risk situations (health-logistic – psychological support);
- f) propose the deployment of special teams responsible of assisting the population in contacting their families;
- g) activate the transportation staff of the Red Cross by supplying special means of transport¹³⁰²;

Within 24 hours

- a) ensure the preparation and distribution of meals for the rescue teams and the population;

¹³⁰¹ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

¹³⁰² OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

b) ensure the deployment of the equipment and staff needed across the affected area for the co-ordination of water purifiers and distribution of drinkable water¹³⁰³.

- Provincial (regional) authorities and arrangements for emergency and disaster management (e.g. crisis HQ)

The functions ascribed specifically to the regions by Legislative Decree no 112/98¹³⁰⁴ are described in Article 108 which defines how to address emergencies and planning and operational functions, such as the activation of urgent interventions in case of crisis (e.g. by using the Fire-Fighters Corps), and the extinction of forest fires among others.

The most important regional tasks can be summarised as follows:

- Making regional programmes for risk prevention and forecasting
- Launching interventions through the National Fire-Fighters Corps in case of a crisis caused by an emergency or an imminent danger
- Formulating the guidelines for the drafting of emergency provincial plans.

The provinces are mainly responsible for the forecasting and prevention activities. Their functions are summarised below:

- To carry out, at the provincial level, forecasting and risk prevention activities established by regional programmes and plans through the adoption of the necessary administrative acts
- To draft provincial emergency plans on the basis of the regional guidelines
- To control how the provincial structures of the emergency services are set up by the civil protection, including the technical services to be activated in case of disasters.

The functions ascribed to the municipalities by Art. 108 of the Legislative Decree no 112/98¹³⁰⁵ concern particularly the prevision and forecasting activities (emergency preparation, setting of plans) and the operational activities (activation of first relief service to the population and urgent interventions), while confirming - without significant innovations- the important role assigned by Legislative Decree no 225/92 to the municipality, and particularly to the mayor as the local authority of civil protection¹³⁰⁶.

¹³⁰³ OECD, OECD Reviews of Risk Management Policies OECD Reviews of Risk Management

¹³⁰⁴ Dlgs n. 112 del 31 marzo 1998: conferimento di funzioni dello Stato alle regioni ed agli enti locali, http://www.protezionecivile.gov.it/jcms/en/view_prov.wp?facetNode_1=f4_4_3&prevPage=provvedimenti&atcode=f4_4_3&contentId=LEG20188

¹³⁰⁵ Dlgs n. 112 del 31 marzo 1998: conferimento di funzioni dello Stato alle regioni ed agli enti locali, http://www.protezionecivile.gov.it/jcms/en/view_prov.wp?facetNode_1=f4_4_3&prevPage=provvedimenti&atcode=f4_4_3&contentId=LEG20188

¹³⁰⁶ IFRC, Law and Regulation for the Reduction of Risk from Natural Disasters in Italy: A Desk Survey, <http://drr-law.org/resources/Italy-Desk-Survey.pdf>, pg. 2

- Local (municipal, town) authorities and arrangements for emergency and disaster management

The functions ascribed to the municipalities by Art. 108 of the Legislative Decree no 112/98 concern particularly the prevision and forecasting activities (emergency preparation, setting of plans) and the operational activities (activation of first relief service to the population and urgent interventions), while confirming - without significant innovations- the important role assigned by Legislative Decree no 225/92 to the municipality, and particularly to the mayor as the local authority of civil protection.

The functions of the municipalities can be summarised as follows:

- To launch, at the municipal level, forecasting activities and risk prevention interventions established by regional programmes and plans
- To adopt all decisions, including those concerning the emergency preparation, necessary to assure first emergency relief in case of disasters at the municipal level (type A)
- To draft municipal and inter-municipal emergency plans in the form of association or cooperation and through the mountain communities to control that these are implemented on the basis of regional guidelines¹³⁰⁷.

- Volunteers and volunteer organisations; specialised NGOs

Act 225/92¹³⁰⁸ recognises the volunteers' organisations as part of the National Service of Civil Protection, being a "national operational structure" and fundamental public component of the system.

The volunteers' organisations of civil protection keep growing thanks also to a law (Framework Act no 266/91¹³⁰⁹) which recognises the added value of organised volunteering as an expression of solidarity, participation and pluralism, while supporting its organisational development.

Another important piece of legislation to regulate the activities of the volunteers' organisation within the National Service of Civil Protection is the Decree of the President of the Republic no 194/2001¹³¹⁰, which regulates the participation of the volunteers' organisations in the civil protection activities by establishing a national register.

Currently, 3,878 voluntary organisations are recognised by the national registry of civil protection on voluntary organisations. Regions and municipalities also maintain their respective registries¹³¹¹.

¹³⁰⁷ DG ECHO, <http://ec.europa.eu/echo>

¹³⁰⁸ Normative acts, <http://www.normattiva.it/ricerca/semplice>

¹³⁰⁹ De Milano C., Volunteering in Italy, http://www.amitie.it/voch/3_VoCH_Volunteering_Italy.pdf

¹³¹⁰ Normative acts, <http://www.normattiva.it/ricerca/semplice>

¹³¹¹ DG ECHO, <http://ec.europa.eu/echo>

- Private businesses

According to article 6 of Legislative Decree no 225/92¹³¹² the private and institutional organisations can participate in the implementation of civil protection activities. For this purpose, the national and local structures of civil protection can stipulate conventions with public and private subjects.

As Private Sector component of the National Civil Protection mechanism are considered:

- Public transportation companies
- Water, gas, electricity and telecommunication companies
- Waste and sewage management companies
- Roads and highways management companies
- Special service providers (e.g. shelter, heavy-duty machinery etc).
- Any other organization or company whose assets and/or services can be employed to face an emergency¹³¹³.

3.2 Organisational cooperation

The Civil Protection Department operates on a European and International level with civil protection interventions abroad, promoting international relations, agreements and technical scientific programmes to improve the prevention of the natural risks or those caused by man.

In particular:

- the Department participates in technical-scientific knowledge exchange and sharing projects and interventions in Europe and on an international scale (e.g. Euromed);
- the Department belongs to monitoring networks for preventing and forecasting risks;
- the Department maintains permanent relations with research centres, specialists and structures organised by the civil protection department of the other Countries;
- the Department promotes, coordinates and participates in international drills;
- the Department shares its own organisational model with the other countries, also through guided tours to international delegations interested in furthering their knowledge of the Italian Civil Protection system;
- the Department participates in meetings and events whose objective is to improve coordination and promote the civil protection culture at an international level.

¹³¹² Normative acts, <http://www.normattiva.it/ricerca/semplice>

¹³¹³ DG ECHO, <http://ec.europa.eu/echo>

It also participates in the European Civil Protection Mechanism, the instrument of the European Union activated to respond in a timely and effective manner to the emergencies occurring on an international scale. All the interventions are based on the principle of subsidiarity, according to which the actions of the Union must always be undertaken on request of and in coordination with the authorities of the affected state. The emergencies can be tackled by means of pre-constituted intervention modules.

In the event of a natural calamity or of a serious event which affects the population of a European or overseas country, the Department may make its own resources and technical competences available, in accordance with the local authorities, either in the emergency phase or in the recovery and reconstruction phase. Like for national emergencies, the Department of Civil Protection declares the state of emergency with a decree and outlines the interventions in the orders to cope with and overcome the situation. The measures prepared by the Department are signed by the Prime Minister.

Like for domestic emergencies, the Department of Civil Protection defines the measures, however, at the moment there is more involvement by the local authorities to induce the regulations ensuring their involvement in the process. “The existing Civil Protection Law (n. 225 of 1992) has been updated through Law n. 100 of 2012 which has given territories, and in particular Regional administrations, more responsibility on disaster prevention and post-disaster recovery”¹³¹⁴. Meaning, decentralising the way emergencies are handled in Italy, to strengthen resilience.

¹³¹⁴ D’Angelo L., Italy: National progress report on the implementation of the Hyogo Framework for Action (2013-2015), pg. 43, http://www.preventionweb.net/files/44371_ITA_NationalHFAPprogress_2013-15.pdf

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

SOPs are set by law for prevention and preparation to emergencies, while response is conducted on the basis of the “Augustus Methodology” explained in section 1.2, which is not compulsory but has been extensively adopted on the whole National territory, and on the basis of Prime Minister’s Decrees setting rules for operational coordination. According to OECD “the civil protection system is able to scale-up operations to a level appropriate to the event in question, as it integrates human resources and equipment from different organisations into coherent and concerted emergency management operations. Key institutional strengths and uniform planning underlie this capability, particularly the civil protection ‘Operational Committee’, and the ‘Augustus’ planning method”¹³¹⁵.

Emergency response procedures are set by law and by Prime Minister’s Decrees. The main driver of response is the local capability to face the event.

Three different “typologies” or “levels” of response are identified by the law:

- A-type events, which can be managed at local level by a single organization operating under its ordinary function;
- B-type events, that can be managed at provincial or regional level by more than one organizations cooperating under their ordinary function;
- C-type events whose extension or severity requires a National response and the employment of extraordinary measures and resources.

C-type events require a Declaration of State of Emergency issued by the Council of Ministers under proposal of the Prime Minister. The Declaration gives the Prime Minister the power to issue Ordinances that can derogate to ordinary law into a predefined timeframe and area set in the Declaration itself.

Internal Procedures are in place internally to DPC in order to activate the CM mechanism in case of emergency. The procedures and relevant guidelines are described in written documents (i.e. the so called “Libretta Rossa” for the CM system activation).

¹³¹⁵ OECD, Review of the Italian national civil protection system, <http://www.oecd.org/futures/globalprospects/reviewoftheitaliannationalcivilprotectionsystem.htm>

4.2 Operations planning

In Italy forecasting and prevention programmes and emergency plans coexist in order to ensure a multi-disciplinary and multi-sectoral coverage of the whole Civil Protection Cycle. Forecasting and Prevention Programmes always commence at a National Level.

All National Authorities are involved in their preparation under the coordination of the National Civil Protection. National Programmes are based on risk maps and event scenarios and are meant to give to Regions a common programming framework for disaster prevention and preparedness. They are then translated by Regions in directives to Provinces and Municipalities for the adoption of coordinated measures. Planning starts at local level. All Municipalities are responsible for preparing emergency plans. Provincial Plans are meant to support Mayors in first response and assistance to the population by coordinating resources located in the different Municipalities of the Province. Regional Plans provide coordination of resources of the Provinces belonging to the Region. At National level, plans are in place for the coordination of response of the entire system in case of major disasters¹³¹⁶.

As example we mention the National Plan for seismic risk prevention (art. 11, Abruzzo Decree Law):

- After the Abruzzo earthquake of 6 April 2009 a new legal measure was issued in order to give a stronger push to seismic prevention. Article 11 of decree no. 39 of 28 April 2009¹³¹⁷ provides for the funding of seismic risk prevention works on the whole national territory and allocates 965 million euros in 7 years. The Civil Protection Department manages the carrying out of article 11, by the orders of the President of the Council of Ministers¹³¹⁸.

4.3 Logistics support in crises

In general, logistics & resource planning is based on:

- Resource allocation and use of military assets
- National guidelines (*Augustus* used in planning existing systems generally work well and are frequently used timely, clear and accurate requests for assistance. Accurate methodology for registration of incoming teams, their equipment, capabilities and needs)¹³¹⁹.

¹³¹⁶ CRISYS project – Summary of National meeting: Italy

¹³¹⁷ Abruzzo Decree Law, Article 11 of decree no. 39
http://www.protezionecivile.gov.it/jcms/en/view_prov.wp?facetNode_1=f1_1&prevPage=provvedimenti&facetNode_3=f1_1_1&facetNode_2=f4_4_3&catcode=f4_4_3&contentId=LEG14148

¹³¹⁸ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹³¹⁹ CRISYS project – Summary of National meeting: Italy

ANAS S.p.a, the government owned company which operates motorways have, in the event of an emergency the specific task

- to provide the logistic structures and infrastructures (heliports, deposit areas for the storage of means and other useful resources to the rescue teams) as well as escort and dispatch riders to the transportation of special material and mobile columns of rescue teams which are allowed easy access to the tollbooths¹³²⁰.

Similar duties are in charge of RFI and TRENITALIA for the railways side.

The information on logistic in emergencies is managed in liaison with different civil authorities, agencies and critical infrastructure manager. For example:

- ANAS S.p.a, in the event of an emergency have the specific task to provide information regarding the state of national mobility particularly focusing on the specific complexities determined by the event and supplies all information on the damages suffered by the road system's infrastructures. Particularly aimed at ensuring the operability of Civil Protections means.
- The specific tasks of the Civil Aviation Authority of Italy (ENAC) in the event of an emergency include the supply of information regarding the operability and capacity of airports, air routes and heliports in the areas affected by the emergency as well as adoption of necessary regulations, in order to facilitate rescue operations.
- Similarly, the ENAV (Ente Nazionale Assistenza al volo) tasks include to supply all information regarding the operability and capacity of the airports in the areas affected by the emergency and plan all measures and regulations necessary to co-ordinate and control the flow of air traffic, in agreement with the DPC/CoaU, including regulation of flight activity in the areas at risk, in order to facilitate the required rescue operations enav/aCU). ENAV is also to assist in the co-ordination of the limitation of the air flow within Italian air space or landing at airports located in the area affected by the emergency with EUROCONTROL, when necessary.
- In respect to for instance a volcano evacuation scenario, the Trenitalia and RFI will contribute in any situation and in the emergency planning which touches their structures. When in an event it would be important to evacuate many people, the train circulation situation can be changed to take away people suddenly. Emergency plans are approved by each prefecture.
- The tasks of the Italian Postal System are to supply information regarding the state of efficiency of the mail services and infrastructures in the areas hit by an emergency or disaster and perform all actions aimed at the restoration of services in the areas hit by disaster,

¹³²⁰ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

including the possible deployment of additional human and technological resources including hi-tech devices¹³²¹.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

In course of alerts for floods, tsunamis and volcanic eruptions, for example, responsibility for risk communication and provision of information to the affected public is primarily placed with the mayor of the affected municipality. Nevertheless, according to an OECD report, crisis communication in Italy requires improvement. There are some information campaigns and training, but in some areas not matching the needs of the population¹³²².

DPC actively promotes the dissemination of information to the affected public to ensure timely and accurate public awareness concerning the event. These efforts include making the population aware of the relevant risk scenarios in the immediate term, and instructions on self-help measures to take.

DPC has a Press office and Communication Service that disseminate information directly and that liaises with the national and foreign media.

DPC is establishing an in-house call centre, which is under development and will be used in the event of disasters. The aim of the call centre will be:

- to provide information to the population concerning the event and the primary measures to safeguard the population;
- to handle calls of potential importance to improve the management of emergencies.

The public utility radio channel isoradio covers most of the Italian highways. It regularly broadcasts traffic reports, weather conditions, railway information and public service reminders at regular intervals around the clock. During emergencies, isoradio also provides listeners with updated information about the incident as it develops.

A recent project is aimed at improving the quality of the existing isoradio network services and at widening the coverage of highways not yet covered by the service. The new isoradio network will be carried out using three different types of radio-diffusion systems: mountain systems, highway systems and subway systems¹³²³.

¹³²¹ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

¹³²² OECD, Review of the Italian National civil protection system, <http://www.oecd.org/futures/globalprospects/reviewoftheitaliannationalcivilprotectionsystem.htm>

¹³²³ OECD Reviews of Risk Management Policies: Italy – Review of the Italian National Civil Protection System

In addition to this unidirectional media the telephone infrastructure composed by the “emergency call number” 112 is widely used for bidirectional communications.

In Italy there are several possible telephone numbers to call different emergency lifeline services, for example 112 emergency calls are answered by the Carabinieri. Requirements under EC Directive 2002/22¹³²⁴ for member states to ensure that the 112 number is well known by their citizens, which is difficult when many different emergency call numbers are maintained, and leads to immediate action by the competent authority for providing the necessary help. The common European Union 112 emergency call number serves the purpose of facilitating urgent help for an individual in an emergency situation or disaster anywhere in the European Union through one single call. This is of particular importance in a country such as Italy where the important tourist industry draws so many foreigners, most of whom would not know of any other number to call than 112 should they find themselves in urgent need to obtain help.

Since the infraction procedure initiated by the European Commission in 2006, the Italian government has been developing initiatives aimed at fully complying with the European Union law on the 112 emergency number. In particular, Italy issued a decree dated 22 January 2008, which provided for a first phase of implementation of the European Directive within the Italian system. This decree was implemented within the province of Salerno to serve as a test for a subsequent implementation in the remaining Italian provinces. However, due to financial constraints, the project had to be suspended in July 2008.

Following a judgement issued by the Court of Justice on 15 January 2009, the Italian government has promoted the establishment of an operational inter-ministerial working Group co-ordinated by DPC, which is currently setting up a strategy aimed at full implementation of the Universal Service Directive, and thus comply with the judgement issued by the European Court of Justice. The working Group consists of representatives of the major ministries and institutions involved in the implementation, such as the ministry of health, the ministry of interior, the ministry of Defence and the ministry for economic Development.

Another development is the introduction of modern digital tetra communication systems and integration of these with the 112 services, which also facilitates cross sector co-operation in emergency response operations. The Review team has found that DPC believes that the 112 emergency number is critical to the facilitation of civil protection mechanisms to efficiently function. Italy however, was also warned from the European Court of Justice in 2009, that “Caller location

¹³²⁴ DIRECTIVE 2002/22/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0022&from=EN>

information is still not available to emergency services from all mobile 112 calls in Italy, as required by EU rules, despite a judgement from the European Court of Justice in January calling on Italy to make this happen”¹³²⁵. Italy would have been heavily fined if not compliant with the EU Directive.

Since then, Italy has over exceeded the expectations and has properly made use of the 112 emergency European call number.

¹³²⁵ Telecoms: Italy urged to take action on 112 caller location to comply with Court judgement, http://europa.eu/rapid/press-release_IP-09-774_en.htm

5 Capabilities

5.1 Human resources

Civil protection in Italy mobilizes resources from all rescue and emergency services (National Fire Brigade; National, Regional and local Police; Carabinieri; Armed Forces; local, provincial, regional and National Civil Protection organizations; local, provincial, regional and National administrations and services; organizations managing essential services, academia, more than 1 Million volunteers managed by Civil Protection volunteer organizations, etc.)¹³²⁶.

- **Permanent Personnel**

Dedicated professional resources are permanently working at the DPC; rescue workers operating in the emergency services (National Fire Brigade; National, Regional and local Police; Carabinieri, etc..) are also in permanent duties and alert.

- **Volunteer**

The voluntary organisation of the Civil Protection Department has blended religious and non-religious bodies and guarantees the right to receive professional relief. With law no. 225 dated February 24 1992, establishing the National Service of Civil Protection, the voluntary organisations took on the role of “national operative structure” and became an integral part of the public system.

With decree of January 25 2008 published in the Official Gazette of the Italian Republic no. 61 dated March 12 2008, the Prime Minister established the National Council of Volunteers of Civil Protection at the Department of Civil Protection of the Prime Minister’s Office. This collegial body with consulting functions has the job of discussing the problems regarding promoting, training and developing the volunteers of the Civil Protection system. The Council also has the job of coordinating the volunteer organisations with the other members and operative structures of the National Service. The Council is made up of a representative for each national volunteer organisation, with offices in at least six regions, registered in the national list established at the department of Civil Protection. The Chairman, in harmony with the Department, convenes the Council each time he or she feels the need and in any case, at least three times a year. Apart from the members, the Head of the Civil Protection Department, the manager of the institutional and international relations of the volunteers office, the coordinator of the voluntary service and a representative of the national association of voluntary firemen, a representative of the Italian Red Cross, a representative of the

¹³²⁶ CRISYS project – Summary of National meeting: Italy

National Mountain and Speleological Rescue Corps as well as the directors of the Civil Protection department, who are called upon in relation to the items on the agenda, participate in the Council meetings. The council was updated with Decree of the Department Head dated July 30, 2010¹³²⁷.

- **Citizens**

Citizens are an integral part of Civil Protection by law. All citizens are called to provide themselves with self-protection and to assist Civil Protection operations by adopting the behaviours recommended by Civil Protection Authorities. Citizens are informed and trained through risk awareness programmes set up at National and local level, informative campaigns in schools and to the general public¹³²⁸.

The first authority of civil protection at the municipal level is the Mayor, who has the duty to inform citizens about possible dangers and security plans for all the community¹³²⁹.

5.2 Material (non-financial) resources

In case of concrete emergencies, coordination and operational activities are carried out through a multi-level hierarchical organisation. This consists of:

- the Municipal Operational Centres (C.O.C.) at the municipal level,
- the Mixed Operational Centres (C.O.M.) and Rescue Coordination Centres (C.C.S.) at the provincial level,
- the Regional Operations Centres at the regional level,
- the Command and Control Direction (DI.COMA.C.) at the national level. Even though the DI.COMA.C represents the national level, it is physically set up on the disaster site or close thereby.

Furthermore, the Department of Civil Protection has institutionalised the National Situation Room (Sit.I.) at its premises, ensuring the 24 hours' presence of the National Service of Civil Protection's main operational structures representing the permanent monitoring and control centre of incidents occurring throughout the national territory and determining risk situations endangering the population, goods, buildings and the environment while guaranteeing the coordinated intervention on behalf of a number of institutions or administrations¹³³⁰.

¹³²⁷ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹³²⁸ CRISYS project – Summary of National meeting: Italy

¹³²⁹ The civil protection handbook for families, http://www.protezionecivile.gov.it/resources/cms/documents/Vademecum_ing.pdf, pg. 4, accessed December 23rd

¹³³⁰ ACRIMAS project : The Political and Legal Framework of EU Aftermath CM - ACRIMAS_D2-1

5.3 Training

Training is performed at all levels (Municipal, Provincial, Regional and National) of the system. It involves Civil Protection professionals, members of rescue organizations and emergency services, personnel from private companies whose activities are relevant for civil protection purposes, volunteers and citizens. Exercises are an essential tool for providing training and spreading risk awareness. Table top, command post and full-scale exercises are therefore organized at all levels. Every year at least one national/European full-scale exercise is conducted; also, a high level and frequent exercising and an established public-private dialogue¹³³¹.

5.4 Procurement

5.4.1 Procurement regulation

The legislative decree number 33/2013 re-ordered obligations of publicity, transparency and dissemination of information by public authorities to citizens.

The DPC website (www.protezionecivile.gov.it) publishes a page (under the tag “Trasparenza”) which is mandatory for publication on corporate websites where all the information and data, including procurement tenders, budgetary and expenditure figures are published, in compliance with the annex of the legislative decree.

The Administration section of the page replaces and incorporates the transparent section and contracts Job opportunities previously available on the site.

From this page, using the appropriate links, it is possible to reach the information and data available on other pages of the site or the site of the Italian government. Some data are also available in tabular format as provided in Article 7 of the law. However, it is not clear in which extend the decree is actuating the procurement directives of the EU.

At the central level (DPC) standing to the data published for the year 2013 on the website of “Consiglio dei Ministri” (<http://www.governo.it/>), beside the ordinary expenditures for the normal activities carried out by the DPC offices, the main topics procured are:

- Fund for seismic risk prevention;
- Recovery support to population for the recent seism (May 2012);
- Technical and scientific services for monitoring and awareness toward natural disaster;
- Meteorological Radars and similar appliances;

¹³³¹ CRISYS project – Summary of National meeting: Italy

- Renting and operational cost for fire bombers aircrafts;
- Contribute to NGOs and other associations;
- Training and similar services¹³³²

5.4.2 Procurement procedures

In conformance with the Decree no. 33/2013, the procurement procedures are based on public tenders.

At central national level (DPC) the office which is charge to manage tenders and similar procurement act is the “Amministrazione e bilancio” office in the DPC structure (office V).

The office is responsible for the management of all the contractual relationships entered into by the Department. It also caters to the setting, management and control of financial and fiscal policies, the development and management of all accounting and financial records and management of the administrative affairs relating to the activities of the various services of the Department. It also handles relations with institutional bodies.

In particular, within this office, the service “Servizio politiche contrattuali” is committed to:

- proceed and negotiate for the supply of goods and services related to the general operation;
- prepare the bid documents to the offices of the Department on the basis of technical specifications drawn up by them or sole responsibility of the procedures covered.
- operate on the basis of the indications of the Office jurisdiction, such framework agreements entered into for the acquisition of goods and services;
- care, on the proposal of the relevant offices, any outsourcing of activities and services;
- provide training for acts of commitment accounting, settlement and payment of bills resulting from the activity of negotiation, on the basis of regularity and visa clearance on each page by the competent office or the Consignee.
- define, on the basis of guidelines and technical specifications provided by aviation, the preparation of contracts for the fleets of the Department and the shaping of measures of financial commitment and pay the resulting bills, based on the regular visa and clearance affixed by that Office.

The service is ultimately responsible for the payment of expenses connected with the settlement of disputes¹³³³.

¹³³² Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

¹³³³ Italian Civil Protection Agency, <http://www.protezionecivile.gov.it>

5.5 Niche capabilities

There appear to be two niche sectors where Italy could strongly contribute to the overall EU CM:

- Satellite based awareness, communication and detections in emergencies;
- Field Hospital assets.

In addition, the Italian aerospace firm BPD Difesa et Spazio (RCS) was actively tried to build military technologies for civil use; amongst others for forest fires. The information however is not publicly available. However, at a European level Telespazio¹³³⁴, the Italian aerospace agency will “demonstrate its activities for the European satellite navigation and localisation programme, Galileo. Telespazio built one of the control centres at the Fucino Space Centre that will manage the Galileo constellation and mission. Together with DLR GfR, a German Space Agency company, Telespazio created Spaceopal the company that manages operations to bring the Galileo system to full capacity”¹³³⁵.

¹³³⁴ Telespazio, a joint venture between Finmeccanica (67%) and Thales (33%), is one of the world’s leading operators in satellite management services, Earth observation and satellite navigation, as well as in the field of integrated communications and scientific programmes. Telespazio plays a leading role in the reference markets harnessing technological experience acquired over the years and through its participation in major European space programmes such as: Galileo, EGNOS, GMES and COSMO-SkyMed. The company in 2011 generated sales of EUR 475 million, and employed around 2,500 staff.

¹³³⁵ Italian airspace agency, www.telespazio.com/documents/9986169/20054134/PR_Fia2012.pdf, accessed December 12th

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

LATVIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response



Responsible Partner: CSDM (Philip Spassov)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by EOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Latvia is a Parliamentary Republic where the President is the Head of State. The President is elected by the Parliament (Saeima). The Government, or the Cabinet of Ministers, is appointed by the President, approved by the Parliament and led by the Prime Minister. There is no regional government level as territorially, Latvia is divided into 109 rural municipalities and 9 cities under state jurisdiction. These two main types of municipalities are led by the municipal council.

The National Security Concept is a strategic document based on analysis of national threat stating principles for prevention of threats, priorities and measures, which must be taken into account when executing new political planning documents, legislative enactments and action plans in the area of national security. The priorities determined in the Concept provide the basis for the development of the National Security Plan by the Cabinet of Ministers.

As in the other Baltic Region States the organisational structure is centralised, i.e. coordinated and mostly organised by the central national civil protection authority. In the case of Estonia, Latvia and Lithuania, the use of private rescue services is low.¹³³⁶

The Prime Minister has the responsibility for the continuous function of the operation of the crisis management system and for the implementation of the related tasks and obligations. The State Fire and Rescue Service, an organisation directly subordinated to the Ministry of Interior, plans, coordinates, leads and controls the civil protection operations. Additionally, the State Fire and Rescue Service has significant responsibility for crisis management at national level.



Figure 24. Logo of the Latvian State Fire and Rescue Service.

At local level the municipal authorities are responsible for establishing and managing the Civil Protection Commission of the municipalities and cities. The Commission coordinates civil protection measures in crisis situations in their respective administrative territories.

The civil protection framework of Latvia foresees the involvement of military forces in support of civil authorities during peacetime emergencies. Latvian Ministry of Foreign Affairs is responsible for the cooperation with the European Union as it implements and coordinates the States external security policy. Cross-border and international collaboration is also organised through the Monitoring and Information Centre operated by the European Commission.

¹³³⁶ EUROBAL TIC Survey: Civil Protection Research in the Baltic Sea Region, p.13.

Potential niche capability that could be filled by Latvia and represent interest to EU crisis management structures is the development of single crisis information systems. The Latvian civil security institutions are looking to improve cooperation in the field of crisis management as they are exploiting new ways for cooperation for the creation of a unified national information system.¹³³⁷

¹³³⁷ ANVIL Project Country Study Latvia, p.37.

Table of Contents

LATVIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	985
Overview.....	986
Table of Contents	988
List of Figures	990
List of Abbreviations.....	991
1 Policy	992
1.1 Risk Assessment	992
1.2 Policy and Governance	993
1.2.1 Strategy scope and focus	994
1.2.2 Monitoring and analytical support to policy making; R&D	994
1.2.3 Policy for Prevention	995
1.2.4 Policy for Preparedness	997
1.2.5 Policy for Response	998
1.2.6 Policy for Relief and Recovery	999
1.3 Financing	999
1.3.1 Investing in preparedness	999
1.3.2 Investing in consequence management	1000
1.4 Policy review, Evaluation & Organisational Learning	1000
1.4.1 Post-Disaster Assessment	1000
1.4.2 Departmental Lessons Learned systems	1001
1.4.3 Centralised (national) Lessons Learned system	1001
1.4.4 International exchange for Lessons Learned	1001
1.4.5 Regular policy reviews	1002
1.5 Resilience	1002
1.6 Information sharing and data protection	1002
2 Legislation	1004
2.1 Crisis (emergency, disaster) management concept.....	1004
2.2 General crisis (emergency, disaster) management law	1005
2.3 Emergency rule	1006

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1006
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1007
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1008
2.7	Legal regulations for international engagements of first responders and crisis managers	1009
3	Organisation	1010
3.1	Organisational chart.....	1010
3.2	Organisational cooperation	1014
4	Procedures	1017
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1017
4.2	Operations planning.....	1017
4.3	Logistics support in crises	1017
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1017
5	Capabilities	1020
5.1	Human resources	1020
5.2	Materiel (non-financial) resources	1020
5.3	Training	1022
5.4	Procurement	1024
5.4.1	Procurement regulation	1024
5.4.2	Procurement procedures	1024
5.5	Niche capabilities	1024
	Resources	1026
	Legislative acts	1026
	Other normative acts	1026
	Official documents (white papers, strategies, etc.)	1026
	Online resources (e.g. websites of key CM organizations)	1026
	Publications	1027

List of Figures

<i>Figure 1. Logo of the Latvian State Fire and Rescue Service.</i>	<i>986</i>
<i>Figure 2. Structure of the Latvian Civil Protection System (Source: EC ECHO)</i>	<i>1011</i>
<i>Figure 3. Structure of the State Fire and Rescue Service</i>	<i>1012</i>
<i>Figure 4. Civil alarm and notification system (Source: EC ECHO)</i>	<i>1018</i>

List of Abbreviations

EADRCC	Euro-Atlantic Disaster Response Coordination Centre
ERCC	Emergency Response Coordination Centre
EURDEP	European Radiological Data Exchange Platform
EUNAVFOR	EU Naval Force
GIS	Geographical Information Systems
MIC	Monitoring and Information Centre
HELCOM	Baltic Marine Environment Protection Commission - Helsinki Commission
UNEP	United Nations Environment Programme

1 Policy

In Latvia there is no concrete definition of crisis management. In the Civil Protection Law the term “disaster management” is used as the performance of preventive, readiness, response and emergency measures for the elimination of the consequences in cases of disasters and when there are threats of disaster. Disaster management shall be implemented by the State institutions, local governments, businesses and citizens.¹³³⁸

The crisis management structure of Latvia consists of definitions such as “civil security” or “civil protection”. The main tasks of the civil security system are to carry out disaster management, to provide aid to victims of disasters and to reduce the possible damage to property and the environment caused by disasters. The main responsibility for the operation of the civil security system and the implementation of the tasks of the system is held by the prime minister of Latvia.¹³³⁹

The Latvian crisis management system has to ensure the anticipation of potential crisis factors, timely decision-making and implementation of measures, as well as management and coordination of state and municipal institutions in preventing crisis situations and mitigating their consequences. The creation of a unified crisis management system in Latvia aims at establishing means for better coordination of the actions of the respective governmental institutions involved and for envisaging the potential factors and risks in a crisis situation.¹³⁴⁰

1.1 Risk Assessment

In Latvia the most common crises are natural disasters which include extreme temperatures, storms and floods. The two of the most severe and recent extreme temperature events occurred in January 2006 and February 2012. Other disasters that have been registered include heavy snowfalls, strong winds, chemical and infrastructure accidents, oil spills and other hazardous materials spills and forest fires.¹³⁴¹

Risks caused by chemical and infrastructure accidents are associated with the transit of hazardous chemicals and oil products through the territory of the country. Long-distance oil and gas pipelines cross the territory of the country and problems could be caused by abandoned chemical substances or waste.¹³⁴²

The risk analysis mechanism is based on provisions in the Civil Protection Law where the tasks of the ministries are specified. These tasks include conducting risk assessment of possible threats to the civil security sector, submission of proposals to the Ministry of Interior at the beginning of each year in order to update the national civil protection plan, and preparing notice regarding the measures and operations carried out in civil protection during the previous year. Additionally, the Ministries must plan the actions for the provision of the operation of the sector in cases of disaster.¹³⁴³

¹³³⁸ Civil Protection Law, Section 1 (3).

¹³³⁹ ANVIL Project Country Study Latvia, p.7.

¹³⁴⁰ National Security Concept 2002, p.10.

¹³⁴¹ ANVIL Project Country Study Latvia, p.7.

¹³⁴² National Security Concept of the Republic of Latvia, 2005_nd_en, p.7.

¹³⁴³ Civil Protection Law, section 8.

Furthermore, the National Security Law envisages preparation of risk analysis by the Information Analysis Service, on the basis of information provided by national security institutions. The analysis is examined by the National Security institutions Council and based on a proposal by the Prime Minister; thereafter, it is examined by the National Security Council and the Cabinet.¹³⁴⁴

The National Civil Protection Plan provides definitions for possible types of risk and provides detailed description of potential areas of risk of storms, earthquakes, flooding, forest fires, leakage of dangerous substances, as well as points out hazardous objects within and outside the state that may endanger the national security. The Plan also assesses the threat of radiation accidents, transport emergencies, damage to gas pipelines, water supplies and electrical facilities, dangerous infectious diseases, etc.¹³⁴⁵

There are numerous government regulations defining the development of risk assessments in the specific civil protection areas. For instance, Regulation No. 1354 dated November 2009 prescribes the development of preliminary flood risk assessment, the flood hazard maps, flood risk maps and flood risk management, as well as the provision of additional information in updating documents; Regulation No.532 from 2005¹³⁴⁶ defines the regulations regarding the procedures for industrial accident risk assessment and the risk reduction measures among others.¹³⁴⁷

1.2 Policy and Governance

The Latvian civil protection system could be best described as a mixed model, where single-level co-ordination is executed by the Prime Minister's Office, while multi-level preparedness and response functions related to hazards of man-made and natural origin fall in the domain of multiple stakeholders. In other words there is no single institution or authority that has the overall responsibility for the operational and strategic levels.¹³⁴⁸ The crisis management responsibilities are distributed among the ministries and state agencies depending on the type of crisis or disaster that has occurred and the respective fields of expertise.

For example, in case of a forest fire the Ministry of Interior and the Ministry of Agriculture will be leading authorities. In emergency cases involving oil or chemical substances spills, the involved authorities would be Ministry of Economy, Ministry of Interior and the Ministry of Environment. The official division of competence of institutions/persons is based on the structure of state, rules of parliamentary democracy and the principles of division of state powers as defined by the Constitution of Latvia.¹³⁴⁹

The Prime Minister has the responsibility for the continuous function of the operation of the crisis management system and for the implementation of the related tasks and obligations. The State Fire and Rescue Service, an organisation directly subordinated to the Ministry of Interior, plans, coordinates, leads and controls the civil protection operations. The State Fire and Rescue Service has significant responsibilities for crisis management at national level.¹³⁵⁰

¹³⁴⁴ National Security Law, section 26.

¹³⁴⁵ National Civil Protection Plan, Chapter II.

¹³⁴⁶ Regulations 532 on Procedures for Industrial Accident Risk Assessment and Risk Reduction Measures.

¹³⁴⁷ Regulation 1354, issued in accordance with the Water Management Act, 24 Nov. 2009.

¹³⁴⁸ ANVIL Project Country Study Latvia, p.8.

¹³⁴⁹ ANVIL Project Country Study Latvia, p.9.

¹³⁵⁰ International CEP Handbook 2009, p.139.

The Latvian national security is based on the total defence principle, meaning that ensuring the defence of the state is not only a military task but also a national one. The total defence system provides joint use of civil and military personnel, as well as material technical resources. The implementation of the total defence system is based on rendering of mutual support and close co-operation between the military and the civil defence systems.¹³⁵¹ The Crisis Management Council, led by the Prime Minister, is responsible for management of the coordination of operational measures of the State institutions in the event of disasters and for civil-military cooperation.

Civil-military cooperation is based on the active participation of the armed forces by providing support in search and rescue work, in conducting preventive and response activities, as well as undertaking emergency measures for mitigation of the consequences in event of disaster.¹³⁵²

At local level the municipal authorities are responsible for establishing and managing the Civil Protection Commission of the municipalities and cities. The Commission coordinates civil protection measures in crisis situations in their respective administrative territories. The civil protection measures are provided for in the National Civil Protection Plan, the Local Government Civil Protection Plans and the Civil Protection Plan of Institutions.¹³⁵³

1.2.1 Strategy scope and focus

A thorough analysis of the disasters and crises conducted by Latvian experts suggest that there are several main gaps in the strategic approach of the crisis management activities.

For example, after analysing the technological accident in the city of Talsi in 1997, which resulted in nine victims and twenty one injured, experts suggested several main areas for improvement: the response coordination between the responsible authorities, alongside the control and technical supervision of the involved equipment.

Furthermore, in the case of the Daugava River major flood in 1998 caused by high water levels, as main shortfalls were underlined the inefficient communication between the decision-making authorities, the need of improvement of relevant legislation and the allocation of the available resources. The evaluation conducted following the flood resulted in a proposition for long-term measures which included State control and maintenance of the barrage systems; cleaning of the Daugava riverbed and conducting research regarding the influence of the Daugava cascade.¹³⁵⁴

In general, several gaps that affect the crisis management system and require improvement are revealed. These gaps mainly include uneven/unstable regulation and institutionalization, resource constraints and deterioration of critical infrastructure.¹³⁵⁵

1.2.2 Monitoring and analytical support to policy making; R&D

The State Fire and Rescue Service is a comprehensive, all-hazard type of civil security institution that performs scientific research in these fields. The Fire Safety and Civil Protection College provides education for civil security experts for undertaking positions in the State Fire and Rescue Service or other

¹³⁵¹ National Security Concept (2002).

¹³⁵² ANVIL Project Country Study Latvia, p.9.

¹³⁵³ International CEP Handbook 2009, p.139.

¹³⁵⁴ *Crisis Management in a Transitional Society: THE LATVIAN EXPERIENCE*, Eric K. Stern and Dan Hansén (editors), p.327.

¹³⁵⁵ *Ibid.*, p.347.

relevant civil security institutions in Latvia. The training processes are supported by social media and electronic mass media as part of innovative educational approaches and solutions. The usage of these new appliances is carried out by the state institutions and local level authorities.

Latvia conducts extensive scientific research in the area of civil security and emergency management not only through the Fire Safety and Civil Protection College but also through numerous private sector actors and consultancies which generate applied research in the field of civil protection. Non-profit organizations are involved in public crisis management structures and major exercises and have a growing role in the field of education, training and applied research.¹³⁵⁶

Latvian universities, enterprises, non-governmental organisations and other civil associations are actively participating in EU funded research programmes in the civil protection domain. These projects mainly consist of applied research, exercises and vocational training.¹³⁵⁷

The Latvian government cooperates with the European Union in the field of civil security by supporting participation in various exercises that are carried out in this field, both with neighbouring countries and within regional organizations such as HELCOM (Baltic Marine Environment Protection Commission - Helsinki Commission) and the Council of the Baltic Sea States.

The State Fire and Rescue Service participates in the development of regulatory enactments regulating fire safety, fire fighting, rescue and civil protection, as well as in the preparation of opinions regarding the drafts of regulatory enactments developed by other authorities.

The Ministry of Interior has underlined the need for conducting studies of possible threats of storms, natural hazards and to increase applied research as key for hazard prevention and mitigation, as well as the need of improving the work in hazard identification and forecasting within the Latvian Environment, Geology and Meteorology Agency.¹³⁵⁸

1.2.3 Policy for Prevention

Latvia's authorities have distinguished the importance of improving the overall crisis management capacity of the country in order the country to efficiently deal with the full spectrum of all potential natural and man-made disasters and crises. Measures have been undertaken for the creation of a set of decision-making and response mechanisms and a national crisis management system. This system is gradually created and it should integrate the existing crisis management capabilities of the public agencies. The system will ensure the ability to coordinate the actions of relevant governmental authorities in order to foresee, prevent crises and mitigate the consequences, as well as to maximise overall efficiency. The principles of total defence will be exploited in the development of the crisis management system.¹³⁵⁹

For achieving adequate level of preparedness, functioning and development of the crisis management system it is required to regularly conduct exercises and training within the inter-institutional framework. The system should be developed in such way that it is compatible to similar structures as of the Latvia's partners in NATO, the EU and the Baltic States.¹³⁶⁰

¹³⁵⁶ ANVIL Project Country Study Latvia, pp.29-30.

¹³⁵⁷ Ibid., pp.35-36.

¹³⁵⁸ ANVIL Project Country Study Latvia, pp.19-21.

¹³⁵⁹ National Security Concept 2002.

¹³⁶⁰ ANVIL Project Country Study Latvia, pp.19-21.

Despite that the systems for training in the field of civil protection is quite different in the Baltic region, they do share some basic features. Education in civil protection and rescue has a legal foundation in all of the Baltic Region countries. Basic and advanced education at the national level is standardised through the use of certificates, as well as the development of educational and training curricula. All of the Baltic region states have specialised schools and colleges which carry out education in civil protection and rescue area.

The National Civil Protection Plan of Latvia defines the measures and objectives for prevention, readiness and response intended for states of emergency, as well as for the mitigation of consequences in crisis situations. The Plan is drawn by the Ministry of Interior in cooperation with other ministries and is approved by the Cabinet of Ministers.¹³⁶¹

According to the National Civil Protection Plan, the State Fire and Rescue Service in cooperation with local governments develops emergency plans for the provision of prevention, preparedness, response and recovery in emergency measures, taking into account the potential types of disasters, the scale and high-risk subjects in the administrative area.¹³⁶²

The functions of the State Fire and Rescue Service include implementing state policy in the field of fire safety, fire-fighting, civil protection and operation of the single emergency phone number 112. Additionally, the organisation has to perform the fire-fighting and rescue works, coordinate fire-fighting and rescue services and volunteer fire-fighter organisations established by local institutions, organisations or companies.

The tasks of the State Fire and Rescue Service for performing these functions include identification of the state of fire safety and potential hazards, and provide the state institutions and local governments with recommendations regarding improvements. Further, the institution organises and performs prevention measures in the field of state fire safety and civil protection and participates in the evaluation of measures taken for assessment and reduction of the risk of industrial accidents.¹³⁶³

Threats to cyber environment in Latvia exist, although the level is considered as average and has not directly influenced the Latvian national security, it is anticipated that electronic attack will occur and have increasing impact in the future. As part of the national security policies, ensuring the safety of information technologies as well as enhancing existing mechanisms and reducing risks caused in the area of information technologies is foreseen in the National Security Concept.

The Crisis Management Council coordinates the operational management of suppression in a crisis situation, as well as the development of plans for prevention.

As priorities of Latvia for prevention of threats in the electronic information environment two essential points are highlighted. First, it is necessary to enhance legal regulation, thus establishing framework of IT critical infrastructure protection, forming and effective institutions for prevention of IT incidents. Second priority is the enhancement of inter-institutional and international collaboration. It is necessary to continue cooperation of responsible public authorities both at the strategic and operational level, i.e. in prevention of electronic attacks and elimination of their consequences.¹³⁶⁴

¹³⁶¹ National Security Law, Section 36.

¹³⁶² National Civil Protection Plan, Part III.

¹³⁶³ State Fire and Rescue Service of Latvia. 2011. Tasks and functions. [ONLINE] Available at: http://www.vugd.gov.lv/eng/about_vugd/about_vugd [Accessed 01 December 15].

¹³⁶⁴ National Security Concept 2011, p.12.

1.2.4 Policy for Preparedness

The National Security Law defines that the national security system emergency preparedness level has to be determined depending on the type of danger, the intensity and the nature, as well as on the size of the endangered territory by the threat. A national security system emergency preparedness shall be determined for a time period, which is necessary in order to prevent the possible danger to the State or to overcome the danger to the State and to perform the emergency measures to eliminate the consequences thereof.¹³⁶⁵

The National Civil Protection Law describes the status of the system readiness control. The State institutions and local governments control the development of the civil protection plans of the relevant subordinated institutions, as well as the fulfilment of the measures provided in the plans.

The State institutions and local governments shall organise civil protection instruction for ensuring the system readiness as the types of civil protection instructions and organisational procedures will be determined by the Cabinet.¹³⁶⁶ The Crisis Management Council prepares for submission to the Cabinet proposals regarding the specification of national security system emergency preparedness.

Educational activities are important part in ensuring preparedness and are mainly organized by the Ministry of Interior and the Fire Safety and Rescue Service. The education and training courses involve key civil security actors such as heads of state institutions, local governments and commercial companies. The courses also aim at involving citizens as volunteers and they include exercises and simulations of possible crisis incidents. In addition to these activities, the state-accredited specialised institutions of higher education provide professional training in this field. This includes mandatory courses in civil security to students and organizations involved in crisis management structures.¹³⁶⁷

Moreover, the Radiation Safety Centre of State Environmental Service is the national regulatory authority in the field of radiation and nuclear safety. The Centre together with representatives from other institutions and professional associations deals with certification of radiation and nuclear safety officers.¹³⁶⁸ In a 2011 report by the Environmental Board, Radiation Safety Department evaluated the Latvian emergency preparedness and response arrangements in the radiation safety domain. In the report it was noticed that despite that there is limited radiation risk in the country the implementation of preparedness and response arrangements was needed.

The main recommendations provided by experts include the performing of exercises, incorporated verification of preparedness and response arrangements for radiological emergencies; the level of training and availability of necessary equipment at State Fire and Rescue Service, State Police, State Emergency Medical Service should ensure the sufficient protection of the personnel intervening during such type of emergency.¹³⁶⁹

The National Armed Forces Law states that State Border Guard and Bank of Latvia Security Department shall perform duties under command of the National Armed Forces to mitigate threats to national security. To ensure readiness of the state institutions in time of crisis, the National Armed Forces, the Bank of Latvia Security Department and the State Border Guard coordinate mechanisms

¹³⁶⁵ National Security Law, Section 22.

¹³⁶⁶ Civil Protection Law, section 23.

¹³⁶⁷ ANVIL Project Country Study Latvia, pp.29-30.

¹³⁶⁸ Latvia CNS report 2012, p.5.

¹³⁶⁹ Latvia CNS report 2012, p.6.

for cooperation in crisis situations and ensure interoperability regarding armament, equipment and communications and training.¹³⁷⁰

1.2.5 Policy for Response

Depending on the type of disaster the responsibility for managing the emergency measures for the response and elimination of the consequences is held by the State Fire-fighting and Rescue Service or the State institution indicated in the National Civil Protection Plan or the local government civil protection plan. The State Fire and Rescue Service performs and manages fire-fighting and rescue operations and activities, responds, performs and manages rescue operations in road accidents and fires, as well as performs rescue works in water accidents.

In cooperation with other authorities the organisation performs measures for urgent emergency response and elimination of consequences of emergency, it receives and processes signals of the single emergency number 112 and provides assistance to individuals in the event of fire or emergency.¹³⁷¹

The Latvian National Security Concept underlines the readiness of competent agencies for immediate response to crisis situations and disasters as an essential task and priority. The Information Analysis Service, an organisation supervised by the Cabinet of Ministers, has to develop and apply most modern methods and technologies for analytical work. The Concept also foresees the creation of unitary Crisis Control Centre in order to establish compatible communication channels between institutions involved in the crisis management.¹³⁷²

The National Armed Forces participate in preventive and response actions, in the performance of emergency measures for the elimination of consequences, and provide support in search and rescue activities. Other state institutions, including local governments and merchants, must cooperate with the Armed Forces in the management of disasters in accordance with the civil protection plans and agreements.¹³⁷³

To improve readiness for crisis and disaster control, Latvia develops crisis control and civil defence elements within the scope of the unitary national security system. This requires making conceptual assessment of legal framework in respect of legal regimes of crisis situations, attraction of additional resources to the civil defence system in such events, as well as of principles for establishing of the national material reserve system. The readiness of responsible authorities for immediate response to crisis situations and disasters must be developed with emphasis on preventive activities, crisis forecasting and elimination scenarios. To enhance the readiness in crisis situations and disaster management effective cooperation and coordination between competent institutions and services is underlined as national security priority.¹³⁷⁴

¹³⁷⁰ State Defence Concept, Executive Summary, p.11.

¹³⁷¹ State Fire and Rescue Service of Latvia. 2011. Tasks and functions. [ONLINE] Available at: http://www.vugd.gov.lv/eng/about_vugd/about_vugd [Accessed 01 December 15].

¹³⁷² National Security Concept of the Republic of Latvia (2005), p.8.

¹³⁷³ Civil Protection Law, section 12.

¹³⁷⁴ National Security Concept of the Republic of Latvia (2005), p.7

1.2.6 Policy for Relief and Recovery

As the fundamental strategic principle of the national defence is to minimise the potential for threats to national security,¹³⁷⁵ the National Civil Protection Plan includes measures for the implementation of the State civil protection system as well as measures for the liquidation of the consequences of emergency situations. The State Fire and Rescue Service manage the response and emergency measures for recovery and elimination of the consequences.

In the case of danger to the State, the Cabinet is entitled to authorise the involvement of the National Armed Forces in the maintenance of public order and liquidation of the consequences in a crisis situation.¹³⁷⁶

1.3 Financing

1.3.1 Investing in preparedness

According to the Civil Protection Law, national institutions shall finance the fulfilment of the civil protection tasks from the allocated State budget resources, while the local governments and merchants from their own resources.¹³⁷⁷

State Fire and Rescue Service resources include 92 fire station buildings, of which approximately 33% were built before 1940, 65% - in the period from 1940 to 1992, 2% - built or renovated in the period after 1990. Fire fighting depot buildings and facilities are physically and morally outdated and are in a very poor state and do not comply with European or National requirements set out by the relevant legislation.¹³⁷⁸ This example reveals the need for investing and improving current rescue facilities in order Latvia to establish better crisis management capabilities.

In addition, Latvian government has signed Memorandum of Understanding with the Swiss Federal Council regarding financial support covering various areas such as security, stability and support for reforms, environment and infrastructure, promotion of the private sector, human and social development and support to non-governmental organisations.

One of the most important projects implemented and financed in accordance with the agreement is the “Support for fire safety measures in local government general education institutions”. This project aims at improving children safety in case of fire incidents in general education institutions in peripheral and disadvantaged regions of Latvia. The project involves partners from 61 local governments in peripheral and disadvantaged regions of Latvia.¹³⁷⁹

The United States European Command in collaboration with the U.S. Embassy in Latvia have also invested in projects for the complete refurbishment of 8 fire brigade stations across Latvia worth over 2.3 million US dollars. The project improves existing station building's structure, therefore improving the work conditions of fire brigades. In Strenči, Gulbene, Aizkraukle and Ventspils, additional garage docks have been built for storing newly acquired, modern rescue equipment.

¹³⁷⁵ State Defence Concept, Executive Summary, p.11.

¹³⁷⁶ National Security Law, section 23 (5).

¹³⁷⁷ Civil Protection Law, section 18.

¹³⁷⁸ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), pp.18-20.

¹³⁷⁹ Annual Report on the Implementation of the Swiss–Latvian Cooperation Programme in Latvia April 2013 – March 2014.

Furthermore, within this cooperation with the U.S. European Command Several new projects have been undertaken, such as the planning to locate an emergency medical service dispatcher centre in the currently abandoned Kuldīga city hospital building with estimated costs of 880.000 USD.¹³⁸⁰

1.3.2 Investing in consequence management

Following an analysis by the department of Strategy at the Ministry of Interior, several suggestions for improving the Latvian civil security system as a result of recent crisis experiences has been made. These suggestions involve allocating funding for improving the coordination between state institutions and local municipalities, as well as reserve funding that would be available in the case of storms, flooding and similar hazards. The allocation of these resources is intended for institutions directly responsible for emergency situations.¹³⁸¹

Moreover, the Long-Term Stabilisation Fund was created in 2008 and aims at ensuring the availability of resources in emergency situations.¹³⁸²

During the past decade the following incidents can be summarized: Chemical accident in Riga (2009), Oil spill in the Daugava River (2007), Extreme temperatures causing 40 deaths (2006), Strong storm (Erwin), causing damage at estimated USD 325 m in 2005, Floods in the Daugava River caused by melting snow (2003), Extreme temperature in Riga with 15 casualties (2003), Extreme temperature in the Riga region, 21 casualties 2001), Epidemic diphtheria in Riga, where 102 persons affected (2000), and Storm (Anatol), six casualties and estimated damages of USD 0.5 m (1999).¹³⁸³

These significant emergencies and crises that have struck Latvia have changed or played role for improving the Latvian civil security system. For instance, following the accident in Talsi (1997) the government assigned a commission with the task of coordinating the subsequent funding for victims and their families.¹³⁸⁴

All the measures taken by the authorities have signified the need for allocating additional funding for the affected areas and population. The costs for recovery in a crisis situation are not formally specified and usually include private responsibilities for disaster management.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The National Civil Protection Plan specifies that the crisis system performance evaluation is carried out for each specific disaster as well as for variety of threats to disasters (national and regional). The evaluation is carried out by the responsible Ministry or institution. The assessment measures include criteria such as timeframe, efficiency and safety for evaluating the performance of the responsible institution. The Plan also sets out the specific timelines for measuring the actual time spent to respond to a crisis event. Further, the measures that have been taken are evaluated as “sufficient” or

¹³⁸⁰ U.S. funds fire station depot reconstruction in Latvian regions, <http://www.vugd.gov.lv/eng/news/6014-us-funds-fire-station-depot-reconstruction-in-latvian-regions>, last accessed 15 October 2014.

¹³⁸¹ ANVIL Project Country Study Latvia, p.21.

¹³⁸² *Budgeting in Latvia*, OECD Journal on Budgeting, Volume 2009/3.

¹³⁸³ ANVIL Project Country Study Latvia, p.7.

¹³⁸⁴ *Crisis Management in a Transitional Society: THE LATVIAN EXPERIENCE*, Eric K. Stern and Dan Hansén (editors), p.145.

“insufficient”, depending on the involvement of available resources, national reserve resources of the National Armed Forces, or request for international assistance has been made. The assessment report is submitted to the Ministry of Interior.¹³⁸⁵

1.4.2 Departmental Lessons Learned systems

Information and indications of such systems is not found in policy, legislative or research documents in the crisis management domain, and could not be obtained within the given timeframe.

1.4.3 Centralised (national) Lessons Learned system

The National Security Law specifies the functions of the Information Analysis Service, which is State administration institution supervised by the Cabinet of Ministers. The agency has to assess and analyse the information received from the national security institutions and provide it to the members of the National Security Council. Further, the organisation develops proposals and recommendations for the National Security Committee, the President and the Prime Minister regarding subsequent activities. It is important to mention that the Information Analysis Service also analyses and forecasts the potential danger to the State.

According to the Latvian legislation the Information Analysis Service has to be approved by the Cabinet of Ministers. The National Security Council may request from the Information Analysis Service and State security institutions all the existing information at their disposal, when it concerns national security interests.¹³⁸⁶

The analysis of threats to the State has to be prepared by the Information Analysis Service, on the basis of information provided by State security institutions. This analysis represents a comprehensive assessment as a result of which the existing and potential specific danger or risk factors to the national security are identified.¹³⁸⁷

The head of the Information Analysis Service may be invited to participate in the meetings of the National Security Council but with adviser rights.¹³⁸⁸

1.4.4 International exchange for Lessons Learned

Latvia participates in the “Baltic every day accident, disaster prevention and resilience” project through Jelgava City Municipality. The project aims at enhancing learning and sharing of lessons learned and will strive to achieve a common understanding of evaluation methods, sharing experiences and knowledge and best practices in the Baltic Sea Region.

The project will make use of the UNEP Awareness and Preparedness for Emergencies at Local Level procedures, together with the safe community and safety performance indicators concepts and existing methodology for assessing the vulnerability of local communities to disasters. It will contribute

¹³⁸⁵ National Civil Protection Plan, Chapter IV.

¹³⁸⁶ National Security Law, section 15.

¹³⁸⁷ National Security Law, section 26.

¹³⁸⁸ National Security Law, section 26.

to implementing the Priority Area Secure of the EU Strategy for the Baltic Sea Region Action Plan and the EU Host Nation Support.¹³⁸⁹

1.4.5 Regular policy reviews

The National Civil Protection Plan specifies that the crisis system performance evaluation is carried out for each specific disaster as well as for variety of threats to disasters (national and regional). The evaluation is carried out by the responsible ministry or institution. The assessment report is submitted to the Ministry of Interior.¹³⁹⁰ The Department of Strategy at the Ministry conducts analyses regarding various topics including crisis management issues.

The Latvian State Fire and Rescue Service implement the state policy with regard to fire fighting, rescue and civil protection, as well as the monitoring of the statutory fire and civil defence requirements.¹³⁹¹

The Latvian National Security Concept emphasises the importance for conducting conceptual assessment of the legal framework with regard to crisis situations, as well as on the attraction of additional resources for the civil protection system in event of threat to the national security.¹³⁹²

1.5 Resilience

The term Resilience is not highlighted in policy or legislative documents related to civil protection or crisis management. Within the framework of this country study resilience term has been identified in few research papers related to different topics. However, these topics do not cover civil protection or crisis management. For example, *The concept of the system resilience within a multi-hazard scenario: application to a Latvian case* study emphasizes primarily on infrastructure issues for withstanding severe weather conditions.¹³⁹³

1.6 Information sharing and data protection

In Latvia the main legislative act regarding data protection is the Personal Data Protection Law which is in force since 2000 and implements Directive 95/46/EC into the national legislation. This law, along with the latest amendments made, defines that the provisions of the Personal Data Protection Law are applicable to the processing of personal data in the field of criminal law and national security.

In addition, the Latvian Data State Inspectorate was established under Regulation No. 408 dated November 2000. The duties of the Inspectorate include ensuring compliance of personal data processing in the State with the requirements of the Personal Data Protection law; taking decisions and reviewing complaints regarding the protection of personal data; registering personal data processing

¹³⁸⁹ *Civil protection financial instrument 2013* available at: <http://ec.europa.eu/echo/en/funding-evaluations/financing-civil-protection-europe/civil-protection-financial-instrument-2013>, last accessed 14 October 2014.

¹³⁹⁰ National Civil Protection Plan, Chapter IV.

¹³⁹¹ SFRS Sectoral Policy, available at: http://www.vugd.gov.lv/lat/par_vugd/nozares_politika, last accessed 14 October 2014.

¹³⁹² National Security Concept of the Republic of Latvia, 2005_nd_en, p.8.

¹³⁹³ Tatjana Kuznecova, Francesco Romagnoli, Claudio Rochas, *The Concept of the System Resilience within a Multi-Hazard scenario: application to a Latvian case*, p.1.

systems; proposing and carrying out activities aimed at raising the efficiency of personal data protection and submission of reports on compliance of personal data processing systems created by government and local government institutions. Furthermore, the act states that the Latvian Data State Inspectorate together with the Office of the Director General of the State Archives of Latvia may decide on the transfer of personal data processing systems to the State archives for preservation.¹³⁹⁴

According to the Law on the Security of Information Technologies the critical infrastructure of information technologies has to be protected in order to ensure the essential functionality of the State and society. The status of the critical infrastructure of information technologies is approved by the Cabinet and in accordance with the National Security Law.

The Security Incidents Response Institution is responsible for promoting security of information technologies in Latvia. The operational tasks and rights of the Security Incidents Response Institution are delegated to the University of Latvia's Institute of Mathematics and Computer Science. The tasks of this institution include providing support for the prevention of an information technologies security incident or coordinate the prevention of such; and providing of recommendations regarding the prevention of the current risks of information technologies, drawn up in accordance with the current threats.¹³⁹⁵

Processing of personal data is allowed in order to provide protection from malicious software. The Security Incidents Response Institution is allowed to transfer processed personal data to the institutions or units specified in the Law on the Security of Information Technologies in cases of recognised threat by malicious software to the national security.¹³⁹⁶

The Crisis Communication Action Plan - 2011 to 2013 foresees the creation of educational materials, social campaigns and targeted training programs for different interest groups - schoolchildren, tourists and people with special needs, etc. Further, the creation of a single website is intended in the Plan, where all the information regarding crisis situations and subsequent actions to be taken could be found. The 112 emergency phone number sites will act as a central electronic source of information on various types of crisis situations for the public. Additionally, 112 emergency phone number accounts on social websites will be created, along with the development of guidelines for crisis communication in social media. Recommendations for local regarding suggested actions in case of crises and how to organize thematic information campaigns for actions in various crisis situations will also be developed.¹³⁹⁷

¹³⁹⁴ Latvia - Data Protection, available at: <http://www.privireal.org/content/dp/latvia.php>, last accessed 14 October 2014.

¹³⁹⁵ Law On the Security of Information Technologies, section 4.

¹³⁹⁶ Ibid., section 7.

¹³⁹⁷ Crisis Communication Action Plan - 2011 to 2013, chapter IV.

2 Legislation

The overall civil protection legislative framework in Latvia is based on two main acts - the National Security Law enacted in 2000 and the Civil Protection Law, which was adopted in 2006. These laws define the roles and responsibilities for civil protection for local governments and institutions.¹³⁹⁸

The National Security Law defines the national security system and its tasks, the competence of responsible authorities and institutions for the national security system, including crisis management. In addition, the Act provides the principles and procedures of coordination, for implementation and control of their activities.¹³⁹⁹

The National Security Law also defines the provisions for the National Civil Protection Plan, which has to include measures for the implementation of the State civil protection system, as well as for preventive, readiness and response measures that are intended for states of emergency. In addition, the Plan sets out measures for the liquidation of the consequences in emergency situations, and determines the actions of the civil protection system in state of war.

The Civil Protection Law creates a system of civil protection for disaster management, ensuring the legal and organisational grounds for the protection of persons, property and the environment in cases of disasters and when there are threats of disaster.¹⁴⁰⁰

2.1 Crisis (emergency, disaster) management concept

The National Security Concept is a strategic document based on analysis of national threat stating principles for prevention of threats, priorities and measures, which must be taken into account when executing new political planning documents, legislative enactments and action plans in the area of national security. The document is prepared by the Latvian Cabinet, examined by the National Security Council and approved by the Parliament, at least once on each convening (by 1 October) from its first year of operation.¹⁴⁰¹

The Concept sets out that disasters listed in the National Civil Security Plan, such as storms, extreme temperatures, earthquakes, floods, fires, leakage of dangerous substances, industrial accidents, dangerous infectious diseases, etc., must be resolved within the framework of the civil security system. The priorities determined in the Concept provide the basis for the development of the National Security Plan by the Cabinet of Ministers. The Plan includes specific state threat neutralisation and prevention measures and means.¹⁴⁰²

In order to ensure the forecast of potential crisis, timely decision-making and implementation of measures for management and coordination of state and municipal institutions in preventing crisis situations and mitigating the consequences national crisis management system is being developed and enhanced.¹⁴⁰³

¹³⁹⁸ International CEP Handbook 2009, p.139.

¹³⁹⁹ ANVIL Project Country Study Latvia, p.15.

¹⁴⁰⁰ Ibid., p.16.

¹⁴⁰¹ National Security Law, section 26.

¹⁴⁰² National Security Concept (2002).

¹⁴⁰³ National Security Concept (2002).

The Strategy of the Ministry of Interior 2014 – 2016 sets out the strategic objectives for the Ministry and its subordinate agencies, including the State Fire and Rescue Service. They include promoting public safety and effective prevention of hazards and developing of closer cooperation national institutions and organizations for crime prevention.¹⁴⁰⁴

2.2 General crisis (emergency, disaster) management law

The National Security Law determines the national security system and tasks as such, the competence of the persons or institutions responsible for the national security system and the principles and procedures of co-ordination, implementation and control of their activities.

According to it the Crisis Management Council in case of a danger to the State coordinates civil-military co-operation and the operational measures of national administration institutions in suppression of the danger to the State. The By-law of the Crisis Management Council shall be approved by the Cabinet. The Crisis management Council is chaired by the Prime Minister and it is composed by the Ministers for the Interior, Defence, Foreign Affairs, Economics, Finance, Justice and Health. The Council may include the heads of State security institutions as well as other State officials but with advisory rights.

The competence of the Crisis Management Council includes coordination of the operational management for suppression of the emergency; to coordinate the development of plans for the prevention of danger to the State; and to prepare for submission to the Cabinet proposals regarding the specification of national security system emergency preparedness. Additionally, in the case of a danger to the State, the Council coordinates the unified and timely implementation of political decisions in national administration institutions, prepares and submits to the Cabinet proposals regarding the status of critically important infrastructure for the national security, alongside the security measures that need to be performed.

The Crisis Management Council is supported by Crisis Management Secretariat which guarantees the operation of the Council and ensures the purposeful and continuous provision of cooperation and support of the responsible institutions to the Crisis Management Council.¹⁴⁰⁵

The National Security Law also defines the provisions for the State Civil Protection Plan, which has to be drawn up by the Ministry of the Interior in co-operation with other ministries and approved by the Cabinet. The State Civil Protection Plan incorporates the measures for the implementation of the State civil protection system, as well as measures for preventive, readiness and response actions intended in states of emergency, as well as the measures for liquidation of consequences of such events.¹⁴⁰⁶

The Civil Protection Law is the other main legislative document in Latvia which provides the Structure and Organisation of the civil protection system. The purpose of the act is to create a system of civil protection for disaster management, ensuring the legal and organisational grounds for the protection of persons, property and the environment in cases of disasters and when there are threats of disaster.¹⁴⁰⁷

¹⁴⁰⁴ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), p.20.

¹⁴⁰⁵ National Security Law, sections 23-24.

¹⁴⁰⁶ Ibid., section 36.

¹⁴⁰⁷ Civil Protection Law, section 2.

It defines that the structure of the civil protection system has to be formed by the national institutions, local governments and merchants. The main tasks of the system are to carry out disaster management; to provide aid to victims of disasters; to reduce the possible damage to property and the environment caused by disasters; and in emergency situation caused by military invasion or war to support the National Armed Forces with resources.

The Civil Protection Law also defines the management procedures of the civil protection system. The Prime Minister has the responsibility for the operation of the system and the implementation of the tasks thereof and, within the framework of the system, to manage the measures at national or regional level for the prevention and overcoming the emergency situation.

The State Fire-fighting and Rescue Service shall manage, co-ordinate and control the operation of the system, however depending on the type of disaster the emergency measures for the response and elimination of the consequences may be taken by another competent national institution indicated in the State civil protection plan or the local government civil protection plans.¹⁴⁰⁸

2.3 Emergency rule

According to the National Security Law the Cabinet has the responsibility to announce a state of emergency, exceptional state and mobilisation in cases determined by law, as well as to decide upon the necessity for support by the armed forces of the North Atlantic Treaty Organisation and European Union Member States during a state of emergency or exceptional state. In addition, the Cabinet has the responsibility for strengthening the national defence capacity in peace time.¹⁴⁰⁹

Depending on the type of danger to the State, the nature and intensity, as well as on the size of the endangered territory, a state of emergency or an exceptional state may be declared in accordance with the procedures prescribed by the law.

State of emergency is declared in cases of natural disasters or accidents, epidemics, epizooties, epiphytes, public disorder, terrorism and armed conflicts, if the safety of society, environment and economic activity is significantly endangered.

An exceptional state has to be declared in the cases in which the state is endangered by an external enemy or within the country internal disturbances have occurred, or if there is a threat that such may arise, in this way endangering the nation. In cases of a state of emergency and exceptional state, mobilisation may be announced in order to carry out tasks related to national security and national defence, as well as to liquidate consequences.¹⁴¹⁰

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The Civil Protection Law defines the tasks of the state institutions and ministries in civil protection which include exploring possible threats in the sector and submitting proposals to the Ministry of Interior up to 20 January each year regarding the clarification of the national civil protection plan, as well as notifying regarding the measures and operations carried out in civil protection during the

¹⁴⁰⁸ Ibid., sections 1-8.

¹⁴⁰⁹ National Security Law, section 10.

¹⁴¹⁰ Ibid., sections 21- 22.

previous year. In addition, ministries need to plan actions for the provision of the operation of the sector in cases of disaster, to coordinate the operation of the subordinated authorities in cases of disasters and coordinate and control the formation of the State material reserves in the sector.

Further, the Ministries have to ensure the fulfilment of the measures specified in the State civil protection plan in case of a military invasion; to ensure the training of employees of the institution in civil protection matters.

The tasks of the other responsible national institutions performing civil protection consist of providing information regarding the resources at the disposal of the institution for the management of disasters upon request from the State Fire-fighting and Rescue Service; ensuring the fulfilment of the measures specified in the National civil protection plan; and ensuring the training of employees of the institutions in civil protection matters.¹⁴¹¹

Additionally, there are multiple other specific legal arrangements and regulations on emergency and disaster management. For example, the Fire Safety and Fire-fighting Law determines the system of fire safety, fire-fighting and rescue services and organisations, tasks and competence of natural persons and legal persons in the field of fire safety and fire-fighting, as well as the structure, functions of the State Fire-fighting and Rescue Service, course of service, obligations, rights, legal protection and social guarantees of State specialised civil servants serving in the State Fire-fighting and Rescue Service.¹⁴¹²

According to this legislative act the Cabinet defines the procedures by which institutions, organisations and commercial companies have to establish fire safety, fire-fighting and rescue services; and subsequent functions and rights.¹⁴¹³

Each civil security institution in Latvia has their specific crisis management proceeding.¹⁴¹⁴

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

At local level the Civil Protection Law describes the tasks and rights of local governments in civil protection. The emphasis is on the role of the chairperson of the local government city or county council, who holds the responsibility for the implementation of the tasks for civil protection in the relevant administrative territory. The main tasks of the local governments include establishing and managing the district civil protection commission; participating in preventive measures in the relevant administrative territory; providing support for to operation and emergency services and if necessary, to evacuate the inhabitants from the territories endangered or affected by a disaster. The civil protection commission of the local government operates pursuant to the regulations developed in accordance with the model regulations approved by the Cabinet.¹⁴¹⁵

Further, the tasks of the local governments include providing proposals regarding formation, maintenance and storage of the national material reserves and organising instruction for the members of the local civil protection commission. The rights of the local governments in civil protection are also

¹⁴¹¹ Civil Protection Law, section 8.

¹⁴¹² Fire Safety and Fire Fighting Law, section 1.

¹⁴¹³ Ibid., section 4-5.

¹⁴¹⁴ ANVIL Project Country Study Latvia, p.27.

¹⁴¹⁵ Civil Protection Law, section 9.

defined and incorporate receiving of information from the institutions and merchants located in the relevant administrative territory for the performance of civil protection tasks, as well as developing additional tasks of civil protection for merchants present in the relevant administrative territory.¹⁴¹⁶

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The Latvian civil security system does not involve non-government relief organisations to a great extent, due to the fact that the sector has not yet developed after the independence of Latvia in 1991. Their role is more visible in the field of preparedness than in responsive matters.

There are volunteer fire-fighting units in some municipalities. The main non-government organisation in Latvia is the Latvian Red Cross with the spectrum of its operations cover the whole territory of Latvia. The Latvian Red Cross Committees are located all around Latvia and cover each district.¹⁴¹⁷

Section 19 of the Civil Protection Law specifies the involvement of legal and natural persons in response measures.¹⁴¹⁸ According to this act legal and natural persons may be involved in response measures and their property may be used in cases of disasters and if human life is endangered. However, they are entitled to receive compensation for expenses and loss caused during response measures. The procedures for compensation and the amount of compensation are determined by the Cabinet. The head of rescue operations shall involve legal and natural persons in response by entering into an agreement in writing.

In the Fire Safety and Fire-fighting Law is stated that local government and volunteer fire-fighting organisations as part of the overall fire-fighting and rescue services teams in Latvia. Volunteer fire-fighter organisations operate in accordance with the Law on Public Organisations and the Associations thereof.¹⁴¹⁹

The Civil Protection Law defines the tasks and Rights of Merchants and their tasks in civil protection include informing the fire safety, fire-fighting and rescue services and local governments regarding the disaster that occurred in the territory of the merchant's object; to ensure the training of employees concerning civil protection; to organise the fulfilment of civil protection measures at the merchant's object.

In addition, merchants have to organise and carry out preventive, response measures and measures for the elimination of the consequences in cases of emergency on the territory of the merchant's object, to establish an alarm and notification system in the objects of industrial accident risk and in other explosive, fire hazard and critically important objects. The overall responsibility is held by the head of the commercial company. Merchants have the right to establish units of civil protection for response in case of disaster and for the performance of emergency measures for the mitigation of the consequences.

¹⁴¹⁶ Civil Protection Law, section 9.

¹⁴¹⁷ ANVIL Project Country Study: Latvia, pp.29-30.

¹⁴¹⁸ Civil Protection Law, section 19.

¹⁴¹⁹ Fire Fighting Law, section 1.

2.7 Legal regulations for international engagements of first responders and crisis managers

According to the Latvian legislation, humanitarian assistance, as well as assistance for the performance of emergency response measures and the elimination of consequences, may be provided to states that have been struck by a disaster. In such scenarios, the State Fire-fighting and Rescue Service and the Centre of Emergency and Disaster Medicine has to establish rapid response unit and medical support unit respectively, for the affected states and thus provide assistance in performing response and emergency measures for the elimination of the consequences.

The Latvian Cabinet determines the procedures for the establishment, maintenance, training and financing of the referred to units, as well as the procedures by which the involvement in the international assistance provision shall be performed. The Latvian Cabinet also sets out the procedures for the receipt and provision of humanitarian assistance, as well as takes a decision regarding the provision of assistance.¹⁴²⁰

The State Fire and Rescue Service of Latvia and the Estonian Rescue Board have signed an agreement seeking to improve first responders' efficiency and effectiveness regarding response time to an emergency and additionally, for the development of capability to work in rough environment such as areas with a difficult or limited access and remote areas with a shortage of water resources. The main risks in such territories in the border area are wildfires. The project is part of the Estonian – Latvian Programme, which is co-financed by the European Regional Development Fund. The budget for this project is over 3 million euros.¹⁴²¹

With regard to the participation in NATO and EU international operations aiming to prevent crises the participation of the Latvian National Armed Forces allows the improvement of their response capabilities and interoperability.¹⁴²²

¹⁴²⁰ Civil Protection Law, section 25.

¹⁴²¹ Estonia - Latvia Programme available at: <http://www.estlat.eu/supported-projects/?project=65>, [last accessed 10 October 2014](#).

¹⁴²² National Security Concept 2011, p.4.

3 Organisation

3.1 Organisational chart

The overall responsibility for crisis management and for the continuous function of the operation of the civil protection system lies with the Prime Minister of Latvia. Civil protection operations are planned, coordinated, and led by the State Fire and Rescue Service - organisation subordinated to the Ministry of the Interior, while the heads of institutions and companies are responsible for civil protection in their own institutions and companies.

The Prime Minister leads the Crisis Management Council which is the main managing body in the emergency events. The Crisis Management Council coordinates the operational measures of the involved national institutions in events of disasters and in cases of civil-military cooperation. The Crisis Management Council Secretariat supports the activities and guarantees the successful functioning of the Council.

The State Fire and Rescue Service performs and manages fire-fighting and rescue operations and activities, responds, performs and manages rescue operations in road accidents and fires, as well as performs rescue works in water accidents. The functions of the State Fire and Rescue Service include implementing state policy in the field of fire safety, fire-fighting, civil protection and operation of the single emergency phone number 112. The State Fire and Rescue Service in cooperation with local

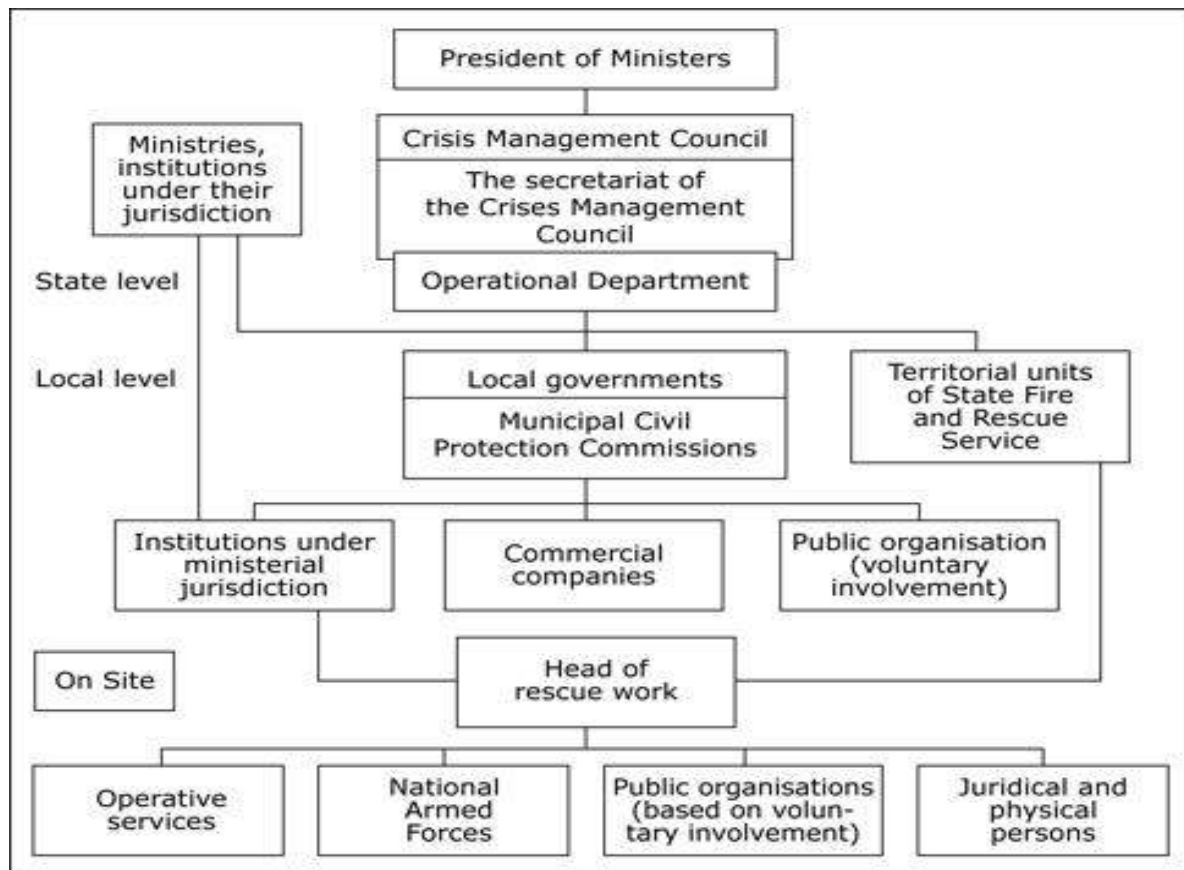


Figure 25. Structure of the Latvian Civil Protection System (Source: EC ECHO)



Figure 26. Structure of the State Fire and Rescue Service¹⁴²³

governments develops emergency plans for the provision of prevention, preparedness, response and recovery in emergency measures, taking into account the potential types of disasters, the scale and high-risk subjects in the administrative area.¹⁴²⁴

At local level the municipal authorities are responsible for establishing and managing the Civil Protection Commission of the municipalities and cities under state jurisdiction. The Commission coordinates civil protection measures in disaster events in the relevant local administrative territories.

The civil protection framework of Latvia foresees the involvement of military forces to civil authorities during peacetime emergencies. The structure of the National Armed Forces consists of the De-

¹⁴²³ Source: State Fire and Rescue Service website, available at <http://www.vugd.gov.lv/eng/structure>.

¹⁴²⁴ National Civil Protection Plan, Part III.

fence Forces, the Home Guard and the Reserve Forces. Among the duties of the Armed Forces defined in the Armed Forces Law is the participation during peacetime emergency operations. Their main tasks include support civilian services with manpower, vehicles, communication and life-support equipment, participating in rescue work and in maintaining public order, as well as to fulfil other specific tasks that require their capabilities, such as blowing up ice on rivers, clearing mines, decontamination, etc.

The Home Guard is organisation created on territorial principle in order to have a battalion ready within the territory of a district or city municipality. The Home Guard battalions have agreements concerning mutual assistance and cooperation with respective local and municipal fire brigades and police departments.¹⁴²⁵ The largest emergency assistance operations carried out so far by the National Armed Forces have been the involvement in the forest fires of 1992 and the spring floods of 1996 and 1998.¹⁴²⁶

Volunteer fire fighting units are created in some municipalities, however, their contribution to crisis management activities is somewhat limited.¹⁴²⁷

The main NGO in the crisis management domain in Latvia is the Latvian Red Cross. It represents a non-profit volunteer-based humanitarian organisation with its operations cover the whole territory of Latvia. The Latvian Red Cross Committees are located in each district having their branches in cities, municipalities and organisations all around Latvia.¹⁴²⁸

One of the main activities of The Latvian Red Cross is the participation in disaster relief operations. Therefore, the organisation has to maintain preparedness in order to participate in the training of society for action during emergencies, as well as to provide support to government bodies responsible for emergency assistance to victims involving local resources and international assistance.

The tasks of the Latvian Red Cross for reducing the impact of emergencies on the affected population include:

- operating within the framework of the Civil Protection Law and cooperating with local governments;
- participation in the districts' planning process for preparedness for emergencies in cooperation with the relevant national bodies;
- engaging disaster preparedness units in relief operations when necessary;
- storing resources to be used in emergency situations and making regular inventory of these resources;
- facilitating the cooperation of the Baltic region Red Cross disaster preparedness units and other actors to be prepared for emergency situations.

Furthermore, the organisation provides educational activities to the society on related actions in emergency situations, for reducing vulnerability, as well as for raising the communities' disaster preparedness by developing and implementing community educational activities. The organisation intends to implement a program for psychological support in crisis situations that will enhance the awareness of the population.¹⁴²⁹

¹⁴²⁵ International CEP Handbook 2009, pp.138-139.

¹⁴²⁶ Ibid., pp.138-139.

¹⁴²⁷ ANVIL Project Country Study Latvia, pp.29-30.

¹⁴²⁸ Ibid., p.30.

¹⁴²⁹ Latvian Red Cross Strategy 2010 – 2012, pp.2-3.

3.2 Organisational cooperation

Operational crisis management responsibility normally rests with the counties and municipalities which, after declaring a state of emergency, form task forces led by the highest local political actor. The overall coordinating responsibility for civil security in Latvia lies with the Ministry of Interior. It provides assistance at local level along with other responsible for crisis management agencies.¹⁴³⁰

To be more specific, operational cooperation in crisis management operations in Latvia could be divided into two main levels of responsibility – the national level and the institutional level (where ministries and their subordinate agencies are the main operational actors).

The national level is the highest level in the Latvian civil security system and is coordinated by the Crisis Management Council. The council has a coordination function as it coordinates operational crisis management between institutions and civil-military cooperation in events of disaster and other threats to the state. The Crisis Management Council is convened only in cases of major emergency, if the crisis is multi-sectoral and requires coordination.¹⁴³¹ The Council is chaired by the Prime Minister and is composed of other Ministers, as it coordinates the implementation of political decisions in emergency situations concerning the national security. In addition it also coordinates the development of preventive plans.¹⁴³²

The main operational crisis management is the second level of institutional responsibility which is covered by the Ministries and agencies. The most important tasks of the ministries within the civil security system include the forecasting and prevention of possible threats in their sector, coordination and control of the operational response, to implement the State Civil Protection Plan and to maintain and further enhance the capacities for response and mitigation. Ministries also have to prepare action plans and coordinate the role of their subordinated bodies in emergency scenarios.

As one of subordinated organisations to the Ministry of Interior, the State Fire and Rescue Service is the main operational manager and coordinator for civil emergencies such as floods, fires, accidents, etc. Each Ministry has several subordinated agencies directly or indirectly engaged in civil security issues.¹⁴³³

Further, the Ministry of Interior coordinates several other agencies that include the State Emergency Medical Service, as the provider of health services in case of general public health emergencies; the Centre for Disease Prevention and Control, as the main responsible body in case of threats caused by diseases; the Security Police, as the main actor in events such as terrorist attacks; and the Coast Guard Service, which is the main actor in case of marine pollution and for search and rescue works at the sea.¹⁴³⁴

Cross-border and international collaboration is also organised through the European Commission within the Framework of Community Mechanism to facilitate reinforced cooperation in civil protection assistance interventions and the Euro-Atlantic Disaster Response Coordination Centre (EADRCC/NATO).

¹⁴³⁰ ANVIL Project Country Study Latvia, p.20.

¹⁴³¹ ANVIL Project Country Study Latvia, p.22.

¹⁴³² Ibid., p.22.

¹⁴³³ Ibid., p.23.

¹⁴³⁴ ANVIL Project Country Study Latvia, p.23.

An example for the procedures by which Latvia contributes to the international humanitarian and disaster relief operations could be the participation of the State Fire and Rescue Service and the Centre of Emergency and Disaster Medicine in such operations. These two organisations establish rapid response unit and medical support unit, respectively, for states affected by a disaster. Their aim is focused at responding to and providing emergency measures in the elimination of the consequences. The Latvian cabinet determines the procedures for establishing, maintaining, training and financing the relevant units, as well as the procedures the relevant international assistance has to be provided.¹⁴³⁵

Latvian Ministry of Foreign Affairs is responsible for the cooperation with the European Union as it implements and coordinates the state external security policy. The Ministry also has the leading role in organizing humanitarian assistance and in developing the legal framework with regard to the civil security system.¹⁴³⁶

Latvia is actively involved in cross-border exercises in the Baltic Sea Region by either hosting or participating. The most recent international exercises include 2006 EU Joint Assistance exercise in Ukraine; the 2008 consequence management field exercise Uusimaa that took place in Finland and was organised by the EADRCC; the field exercises in 2009 performing chemical pollution scenario in the Daugava River; the 2009 field exercises in the case of a chemical spill in Grodno Azot and the annual Latvian-Estonian exercise under the bilateral Rescue Services Agreement.¹⁴³⁷

In addition, Latvia has signed several cross-border agreements within the EU framework. Such projects include the “Building Cross-border Capacity to Perform Joint Activities in Tough Environment”, aiming at improving first responders’ efficiency and effectiveness to an emergency; INTERREG Baltic Sea Region Latvian - Lithuanian - Belarusian cross-border cooperation programme supported by the European Neighbourhood and Partnership Instrument; and the cross-border cooperation programme between Latvia and Lithuania in protection of population and environment.

Latvia engages in a broader discussion within the European Council on the strategic perspective of the further development of the Common Security and Defence Policy, the forms of military cooperation among member states and the enhancement of the EU's civilian and military capabilities.

BaltFloodCombat is a cross-border cooperation project between Estonia, Latvia and Lithuania. The three Baltic States are represented respectively by the Estonian Rescue Board, Latvian State Fire and Rescue Service and Lithuanian Fire and Rescue Department under the Ministry of the Interior. The project is within the framework of the Preparatory Action of the Civil Protection Mechanism and is funded by the European Commission. The European Commission finances 80% of the project while the remaining funding comes from the national budgets. The aim of the project is to create reliable and efficient national flood response capacity, and also to establish and register in CECIS a multinational High Capacity Pumping (HCP) module, consisting of commonly trained personnel and up-to-date equipment. Main objectives of the project include enhancing national flood response capability; strengthening European rapid response capacity, and also to discover, through innovative approach, possibilities and ways of multilateral civil protection capacity building.¹⁴³⁸

¹⁴³⁵ EC Vademecum – Country profile: Latvia, prevention and preparedness.

¹⁴³⁶ ANVIL Project Country Study Latvia, p.24.

¹⁴³⁷ Ibid., p.29.

¹⁴³⁸ BaltFloodCombat, available at: http://www.baltfloodcombat.eu/index.php?option=com_content&view=article&id=22:whats-new-in-15&catid=29:the-cms, last accessed 10 October 2014.

The Operational Management Department of the State Fire and Rescue Service is the national contact point for disaster management and response and, if necessary, ensures regular communication and exchange of information with the European Commission's Emergency Response Coordination Centre (ERCC) and the NATO Euro-Atlantic Disaster Response Coordination Centre (EADRCC).¹⁴³⁹

Latvia takes part in the EU-Civil Protection Mechanism and NATO-EADRCC systems and the OSCE Observer Mission to Georgia. In 2013 national experts participated in the EU civilian operations in Georgia and in Afghanistan, as well as in EU naval operation EUNAVFOR Atalanta. Experts from the State Fire and Rescue Service participate in various working groups and committees within the framework of EU and NATO, such as the Civil Protection Working Group of the Council of Europe.

Latvia has not officially requested cross-border or international disaster assistance through regional and international arrangements. Latvia has signed mutual civil security and civil protection agreements to receive and provide assistance in the emergency and crisis situations with Estonia (2001), Lithuania (2001), Sweden (2002), Belarus (2002), Hungary (2003), Ukraine (2006), Uzbekistan (2008), Russia (2010) and Azerbaijan (2011). In addition, Latvia actively participates in regional intergovernmental forums such as the Council of the Baltic Sea States and the Helsinki Commission (HELCOM).¹⁴⁴⁰

Moreover, Latvia has signed bilateral agreements for early warning and assistance in case of radiological or nuclear accidents with Lithuania, Estonia and Ukraine and also agreements for cooperation in case of natural and man-made accidents with Belarus, Estonia, Hungary, Lithuania and Sweden.

The Latvian Radiation Safety Centre of State Environmental Service also participates in EURDEP (European Radiological Data Exchange Platform), which represents both a standard data format and a network for the exchange of environmental radiation monitoring data between European countries in real-time.¹⁴⁴¹

¹⁴³⁹ European Union Civil Protection Mechanism, available at: www.vugd.gov.lv/lat/starptautiska_sadarbiba/eiropas_kopienas_civilas_aizsardzibas_mehanisms, last accessed 10 October 2014.

¹⁴⁴⁰ ANVIL Project Country Study Latvia, p.23.

¹⁴⁴¹ Latvia CNS report 2012, p.7.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Information related to SOPs is not found in policy, legislative or research documents in the crisis management domain, and could not be obtained within the given timeframe.

4.2 Operations planning

The National Civil Protection Plan provides the provisions for civil protection entities undertaking preventive, preparedness, response and recovery emergency measures in occurrence of national and regional disasters, as well as a military invasion or in case of war. The Plan defines the implementation of the Civil Protection Law requirements and identifies the civil defence planning and operational objectives. Additionally, the document sets out the courses of action, tasks and the objectives in planning and carrying out civil protection measures in disaster events.¹⁴⁴²

At local level Cabinet of Ministers Regulation No. 423 dated 26 June 2007 establishes the civil protection plans of local governments, merchants and institutions as well as the procedures for developing and approving these plans. In addition, there are several other Cabinet Regulations that provide for risk reduction measures such as No. 532 "Regulations regarding the procedures for industrial accident risk assessment and risk reduction measures" (19 July 2005) and No. 626 "Regulations regarding criteria for the specification of objects of increased danger and the duties of the owners (possessors, managers) of such objects for ensuring measures for reduction of risk" (18 September 2007).¹⁴⁴³

Local governments develop the respective civil protection plans at local government level in cooperation with the State Fire and Rescue Service. Each civil security institution in Latvia has their specific crisis management proceeding.¹⁴⁴⁴

4.3 Logistics support in crises

The Ministry of Interior coordinates the emergency logistics. The Latvian armed forces provide assistance in civilian emergencies in terms of manpower and logistics when required.¹⁴⁴⁵

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

According to the Civil Protection Law the civil alarm and notification system has to ensure the warning and informing of the population regarding disasters or threats, as well as the announcement of

¹⁴⁴² National Civil Protection Plan, section 1-3.

¹⁴⁴³ Ibid., section 5.

¹⁴⁴⁴ ANVIL Project Country Study Latvia, p.27.

¹⁴⁴⁵ Ibid., p.22, p.36.

an emergency situation, the state of emergency or mobilisation. The relevant procedures for the use, establishment and financing of the civil alarm and notification system are determined by the Latvian government. Mass media has to provide information received by the State Fire and Rescue Service regarding the threat and guidance for further actions of the population free of charge in such event.¹⁴⁴⁶

The Crisis Communication Action Plan 2011 – 2013 is designed to provide a planned, coherent and coordinated communications in crisis situations and to facilitate competence of the officials involved in communication as well as to raise awareness and educate population for actions in the event of a crisis. The Plan also foresees the development of planned, integrated and coordinated public administration procedures for circulation of information in crises situations. In addition, crisis communications expert group is to be established within the Crisis Management Council. The plan anticipates the development of recommendations for crisis communication intended for government communications professionals and other officials involved in crisis communications. Moreover, the development of procedures for managing crisis events information, as well as the rights and obligations of communications officers in crisis situations are stated in the Plan.

The Crisis Communication Action Plan highlights the importance of educational activities and actions in case of crisis situation. Existing training programs in secondary and vocational education institutions are to be updated and supplemented in order to increase the crisis communication knowledge of the state and local officials responsible in crises situations. Training of state and local government

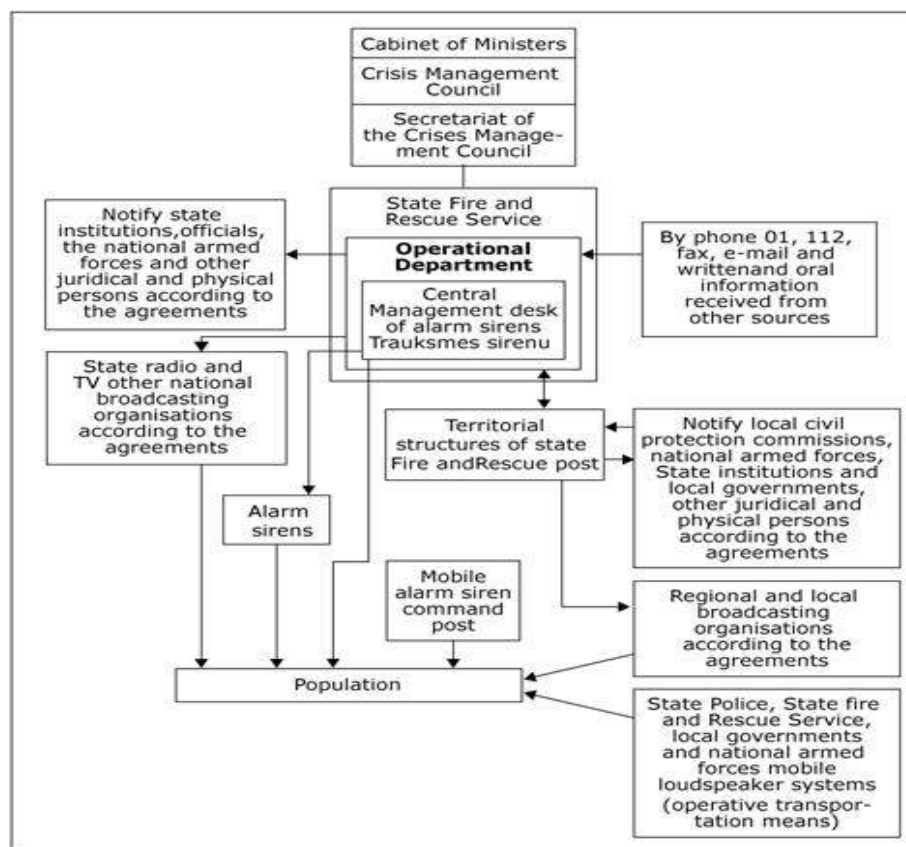


Figure 27. Civil alarm and notification system (Source: EC ECHO)

¹⁴⁴⁶ Civil Protection Law – Section 15.

officials is also listed as one of the main tasks in the Plan for the developing efficient crisis communication. The Ministry of Interior is the coordinating authority for the executing the plan.¹⁴⁴⁷

Municipalities and local governments are main actors responsible for maintaining the emergency communication system. Emergency services in Latvia have their own risk mapping services including risk registration systems.

The “112” single emergency number has been implemented in Latvia and National Geographical Information Systems (GIS) is being gradually enhanced. The GIS system aims at describing the coordination of GIS services, collection of data and creation of state GIS portal. The aim of the GIS Pilot Project is to create a digital map of Riga with the information regarding emergency events that fall under the competence of the State Police and State Fire and Rescue Service. The overall responsibility and coordination for the development of GIS services has the Information Centre of the Ministry of Interior and the State Fire and Rescue Service. Additionally, Electronic Communications Office has been established with its operational goal is to manage the resources of radio-frequency range in the field of electronic communications.¹⁴⁴⁸

¹⁴⁴⁷ Approval of the "Crisis communication plan 2011 – 2013, available at: www.vugd.gov.lv/eng/about_vugd/815-approval-of-the-crisis-communication-plan-2011-2013, Last accessed 11 October 2014.

¹⁴⁴⁸ ANVIL Project Country Study Latvia, p.27.

5 Capabilities

5.1 Human resources

The National Armed Forces provide support to the Security Police, State Police, State Border Guard, State Fire and Rescue Service, and other institutions when resources at the disposal of these institutions are not sufficient for the implementation of emergency measures necessary for crisis and consequence management and special resources (such as mine clearance and explosive devices, ships, aircraft and off-road land equipment or specific geo-spatial information) are only available by the National Armed Forces and are deemed necessary.¹⁴⁴⁹

It is prohibited to form, train and arm military public organisations of volunteers or associations of such organisations.¹⁴⁵⁰ Volunteer fire fighting units are created in some municipalities however their contribution to crisis management activities is somewhat limited.¹⁴⁵¹

Regarding cyber defence the Latvian State Defence Concept foresees the development of capabilities of the Armed Forces and the Cyber Defence Unit to react in a crisis situation and to manage the consequences of major incidents. It is planned that the Armed Forces will establish an electronic communication network for emergency situations, as well as an information technology and communication systems to ensure the support of National Armed Forces management capabilities in crisis situations will be developed.¹⁴⁵²

5.2 Materiel (non-financial) resources

In the National Security Concept the importance of making a conceptual assessment of legal framework in respect to legal regimes of national threat and crisis situations, attraction of additional resources to the civil defence system in the event of national threat, as well as of principles for establishing of the national material reserve system is highlighted.¹⁴⁵³

In Latvia, the involvement of resources in disaster management involves the operational and emergency services, civil protection formations that are mobilisable – the Operational Control Centre of the State Fire and Rescue Service, the State material reserve resources, local government resources; and the resources available at the disposal of a commercial company.

The State Material Reserves Law defines the creation and storage of state material reserves for the civil defence system the usage in cases of national risk. The material reserves are to be used for disaster management by the institutions involved, in cases of shortage in the available response measures. Reserves planning of the civil protection measures are defined in the plans provided by the Ministry of Interior, involving their subordinated institutions, as well as by local authorities and businesses. Material Reserves are to be used in cases such as disaster response activities for the elimination of consequences of an emergency; for the response actions of the involved personnel for

¹⁴⁴⁹ State Defence Concept 2012, pp.9-10.

¹⁴⁵⁰ National Security Law – Section 18.

¹⁴⁵¹ ANVIL Project Country Study Latvia, pp.29-30.

¹⁴⁵² Cyber Security Strategy of Latvia 2014–2018, p.12.

¹⁴⁵³ National Security Concept of the Republic of Latvia, 2005_nd_en p.8.

ensuring the protection of the population; for public safety and order; for the civil protection and disaster management training of involved personnel.¹⁴⁵⁴

State Fire and Rescue Service resources include 92 fire station buildings, of which approximately 33% were built before 1940, 65% - from 1940 to 1992, 2% - built or renovated in the period after 1990.¹⁴⁵⁵ Firefighting depot buildings and facilities are physically and morally outdated and are in a very poor state and do not comply with European or national requirements set out by the relevant documentation.

In addition, another issue concerning the capabilities of the State Fire and Rescue Service is the location of these fire station buildings. They are mostly situated in limited area that prevents the perspective for establishing modern fire fighting and rescue equipment, special and technical equipment, nor safety conditions for the effective performance of the functions specified.

According to statistics by the National Fire and Rescue Service over period of five years the number of rescue operations increases every year to reach 6173 for 2013, compared to 2640 in 2009, 2010 - 3431, 2011 - 4517, 2012 – 4835. The number of fires has increased by 9.16% compared to 2012, to reach 9821.¹⁴⁵⁶

According to Regulation No. 61 dated 3 February 2004 by the Cabinet of Ministers, the State Fire and Rescue Service has to ensure the arrival on scene of the response teams in cities within 5 minutes, to the rest of the urban and rural areas with a population density of 10 or more persons per square kilometre - within 15 minutes and in rural areas with a population density of less than 10 people on the square kilometres – within 25 minutes after receiving the emergency signal.¹⁴⁵⁷

Currently, only about 80% of the emergency cases, State Fire and Rescue Service unit can be sent to the scene to perform fire extinction and rescue work.

In several regions the distance from the State Fire and Rescue Service fire station building to the point of the emergency event is as much as 30 to 40 km, meaning that in about 20% of the cases it is not possible to ensure the required action and as a result of the population does not receive timely and quality assistance.

In order to provide the public with timely, high-quality assistance it is needed to improve the State Fire and Rescue Service territorial unit network.¹⁴⁵⁸

The Air Force carries out Latvian airspace surveillance, control and defence, provides air defence support to the Land Forces units and participates in search and rescue operations over the Baltic Sea, the Bay of Riga and dry land. In the beginning of the new century two new Mi-8 Hip helicopters were bought. Both helicopters are fitted with search and rescue equipment, but could also be used for transportation of troops, evacuation and support of the Special Forces.¹⁴⁵⁹

The State Border Guard has one helicopter Augusta Bell 206 and two Augusta Bell 109 capable of performing search and rescue missions both on the water and on land, and can also provide simultaneous transport of multiple victims (up to 30 people). Operational capability at sea is limited, because the helicopters' permanent site is one-hour flight from the Baltic Sea coast. The "Concept for

¹⁴⁵⁴ State Material Reserves Law, art. 1-2 and 10.

¹⁴⁵⁵ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), pp.18-20.

¹⁴⁵⁶ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), pp.18-20.

¹⁴⁵⁷ Ibid., p.21.

¹⁴⁵⁸ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), p.21.

¹⁴⁵⁹ Nacionālie bruņotie spēki – tehnika, available at: http://www.mil.lv/Vienibas/Aviacijas_baze/Tehnika.aspx, last accessed 1 December 2015.

Search and Rescue Capability Development and Improvement Using Helicopters” envisages possible solutions for the main capabilities shortfalls when using helicopters in rescue operations.¹⁴⁶⁰

The existing radio system by the Ministry of Interior currently covers approximately 93-94% of the country by providing operational radio services in emergency situations such as natural disasters, or technological accidents, and regardless of public communications operators.¹⁴⁶¹

In Latvia there are 164 alarm sirens in Riga and other cities for population warning of potential hazards.

5.3 Training

Training and education activities are mainly organized by the Ministry of Interior and its subordinate the State Fire and Rescue Service. The training courses conducted include exercises and simulations of possible crisis incidents. The target group involves heads of state institutions, local governments and commercial companies, as well as citizens as volunteers. Volunteers have been increasingly integrated into civil protection activities, despite still having limited influence in crisis management operations.¹⁴⁶²

Alongside the training activities performed by the above mentioned institutions, the national accredited higher education institutions provide training in this field. The requirements for the civil security training are set by the government, however, local authorities and municipalities can conduct complementary courses.¹⁴⁶³

In addition, the Civil Protection Law states that educating to the population in civil protection matters through the mass media and for distributing informative materials, has to be performed by the State institutions and local governments, as well as by merchants in the relevant cases of affected persons within the merchants’ objects.

The Regulations of the Cabinet for provisions of methods and procedures for organizing civil protection training, issued in accordance with the Civil Protection Law, defines the rules of civil defence training and the procedures of their organization, as well as the types of training and procedures for civil defence training. The document divides training into four main categories:

- Local training, which testing the readiness for cases of local disaster;
- Regional-level training, which testing regional disaster preparedness;
- State-level training, which testing the readiness of national-wide disaster;
- International training, which is established to examine the coordinated actions between a number of the competent national authorities and international organizations.¹⁴⁶⁴

Local level training is organised at least once every three years and is conducted by the chairman of the local government council, head of institution. Training of employees in civil protection matters shall be organised by the employer.¹⁴⁶⁵

¹⁴⁶⁰ Government Regulation No.198 “Concept for Search and Rescue Capability Development and Improvement Using Helicopters.”

¹⁴⁶¹ Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation), pp.18-20.

¹⁴⁶² ANVIL Project Country Study Latvia, pp.36-37.

¹⁴⁶³ ANVIL Project Country Study Latvia, p.29.

¹⁴⁶⁴ Cabinet of Ministers Regulations No. 772, Riga, 22 September 2008.

¹⁴⁶⁵ Civil Protection Law – Section 19-21.

National and regional training is conducted by the responsible training manager, who is appointed by the Prime Minister. At national level, training has to be organised at least once in every four years.

International Training is organised according to the relevant international organization procedures and the participation of Latvian institutions is based on the basis of invitations.¹⁴⁶⁶

The Fire Safety and Civil Protection College is an educational establishment subordinate to State Fire and Rescue Service. The College provides professional educational programmes in the preparation of civil protection specialists for the State Fire and Rescue Service, and for other civil protection services and units such as fire-fighters, rescue and protection services, etc.¹⁴⁶⁷

Furthermore, national exercises are performed as part of the Latvian - Lithuanian cross-border cooperation programmes and the Baltic Sea Regional INTEREG IIIB Neighbourhood Programme between Latvia, Lithuania and Belarus. Another exercise carried out was the exercise conducted in 2005 and its main scenario was rupture of dam and subsequent floods. Latvia participates in various international exercises which include EU Joint Assistance in 2006, Ukraine, consequence management field exercise Usimma in 2008 organised by the Euro-Atlantic Disaster Response Coordination Centre (EADRCC) in cooperation with Finland; the Field exercises in 2009 with the cases of chemical pollution of the river Daugava and chemical spill in Grodno Azot, as well as the Annual Latvian-Estonian exercise under the bilateral Rescue Services Agreement.¹⁴⁶⁸

Latvian cooperation in the field of training with other NATO member states in the territory of Latvia and other Baltic States is essential for the improvement and enhancement not only of the disaster response preparedness and response, but also is important for the Latvian national armed forces. Responsible institutions have to ensure the maintenance of the host nation support system and must carry out regular mutual coordination and training in order to ensure the possibility to rapidly deploy allied forces. The host nation support system is of vital importance in prevention of the consequences of natural and human-caused catastrophes and international training.¹⁴⁶⁹

In the cyber security domain, the 2014–2018 Cyber Security Strategy of Latvia lists the required actions for improving the capabilities for crisis preparedness and capacity to act in crisis situations.

These actions include organising regular theoretical and practical training at national level with the involvement of high-level officials and the private sector in order to develop mutual understanding and to coordinate the management of crisis situations. Moreover, the strategic document outlines the need of developing regional and international cooperation, to ensure regular training for providing and receiving support in a crisis situation and to organise crisis training and security breach tests at a national, regional and international level.

In addition, planning and implementation of security measures for critical infrastructure is regulated by the Cabinet of Ministers. In order to exchange knowledge and experience, as well as for improvement of procedures, representatives of critical infrastructures are regularly involved in training organised by Information Technology Security Incident Response Institution of Latvia.¹⁴⁷⁰

¹⁴⁶⁶ Cabinet of Ministers Regulations No. 772, Riga, 22 September 2008.

¹⁴⁶⁷ Fire Safety and Civil Protection College, available at: <http://ucak.vugd.gov.lv/>, last accessed 09.10.2014.

¹⁴⁶⁸ EC Vademecum – Country profile: Latvia, prevention and preparedness.

¹⁴⁶⁹ National Security Concept 2011, p.4.

¹⁴⁷⁰ Cyber Security Strategy Of Latvia 2014–2018.

5.4 Procurement

5.4.1 Procurement regulation

The national legislation of Latvia for public procurement is regulated by two main laws – the Public Procurement Law and the Law on Procurement for the Needs of Public Service Providers. The Ministry of Finance is in charge of the overall public procurement policy.

Latvia has adopted several EU Directives into its legislation such as Directive 2004/18/EC and Directive 2007/66/EC, both implemented by the Public Procurement Law which is in effect since 1 May 2006.

Directive 2009/81/EC is implemented by a separate law – the Defence and Security Procurement Law with amendments under the Directive 2009/81/EC; Directives 2004/17/EC; Directive 2004/18/EC.

The central purchasing bodies in Latvia in the security and defence sectors are the Providing Agency of the Ministry of Interior and the State Agency for Defence Properties of the Ministry of Defence. In addition, other ministries, agencies and local governments have their own purchasing structures that act as purchasing bodies.¹⁴⁷¹

5.4.2 Procurement procedures

Information and indications specific procurement procedures are not found in policy, legislative or research documents referring to the crisis management domain, and could not be obtained within the given timeframe.

5.5 Niche capabilities

Potential niche capability that could be filled by Latvia and represent interest to the EU crisis management structures is the development of single crisis information systems.

The Latvian civil security institutions are looking to improve cooperation in the field of crisis management as they are exploiting new ways for cooperation for the creation of a unified national information system. The system will contain data on registered events and provide this data for the development of analytical, planning, statistical and other activities and strengthen the collaboration among the services.¹⁴⁷²

The Ministry of Interior, the State Fire and Rescue Service and the State Police are the key actors involved in leading the initiative for developing electronic data exchange among the emergency services. Such initiative will allow having simultaneous visualization of information regarding events registered by the State Police, as well as regarding predefined types of events registered by the State Fire and Rescue Service.

Furthermore, the NATO Strategic Communications Centre of Excellence established in Latvia provides comprehensive analyses, timely advice and practical support to the Alliance in the strategic communications area of expertise. The centre conducts analyses, develops doctrines, conducts research and

¹⁴⁷¹ Comparative Survey On The National Public Procurement Systems Across The PPN, Rome 2010.

¹⁴⁷² ANVIL Project Country Study Latvia, p.28.

experimentation activities, and enhances training and interoperability through common understanding of NATO Strategic Communications policy and procedures.¹⁴⁷³

The centre's activities could serve as an example of a potential niche capability of interest to the EU. Strategic communications is a broad topic that encompasses all information disciplines within the STRATCOM community - Public Diplomacy, Public Affairs, Military Public Affairs, Information Operations and Psychological Operations. In crisis management context strategic communication play an important role as it focuses on objectives at strategic and tactical levels, and especially important for the decision making process.

Latvia could develop similar capabilities, within the European Union, in the field of strategic communications, communication during crises or other related subject to the benefit of the Member States.

¹⁴⁷³ STRATCOM COE, structure, available at: <http://www.stratcomcoe.org/Organisation/FocusAreas.aspx>, last accessed 30 November 2014.

Resources

Legislative acts

Civil Protection Law, into force 1 January 2007, adopted 5 October 2006;

Fire Safety and Fire Fighting Law, into force 1 January 2003, adopted 24 October 2002;

Law on the Security of Information Technologies, into force 1 February 2011, adopted 10 November 2010;

National Security Law into force 1 January 2002, adopted 14 December 2000;

Personal Data Protection Law, in force since 2000

State Material Reserves Law into force 1 January 2008, adopted 21 June 2007;

Other normative acts

Cabinet of Ministers Regulation 1354, adopted 24 November 2009

Cabinet of Ministers Regulation No.198

Cabinet of Ministers Regulations No. 772, adopted 22 September 2008

Crisis Communication Action Plan - 2011 to 2013, available at http://www.vugd.gov.lv/eng/about_vugd/815-approval-of-the-crisis-communication-plan-2011-2013, last accessed 16.10.2014

National Civil Protection Plan into force 1 January 2007, adopted 5 October 2006

Regulations regarding the Procedures for Industrial Accident Risk Assessment and Risk Reduction Measures No. 532, Adopted 19 July 2005.

Official documents (white papers, strategies, etc.)

Annual Report on the Implementation of the Swiss–Latvian Cooperation Programme in Latvia April 2013 – March 2014

Cyber Security Strategy of Latvia 2014–2018

Latvian Red Cross Strategy 2010 – 2012

National Security Concept of the Republic of Latvia (2002)

National Security Concept of the Republic of Latvia, (2005)

State Defence Concept, 10 May 2012

Strategy of the Ministry of Interior 2014 – 2016 (unofficial translation)

Online resources (e.g. websites of key CM organizations)

<http://www.mk.gov.lv/en> – [Government of the Republic of Latvia](#)

<http://www.iem.gov.lv/eng/> - Ministry of Interior of Latvia

<http://www.mod.gov.lv/en.aspx> - Ministry of Defence of Latvia

http://www.vugd.gov.lv/eng/about_vugd/about_vugd - [State Fire and Rescue Service](#)

<http://ucak.vugd.gov.lv/> - [Fire Safety and Civil Protection College](#)

<http://www.rs.gov.lv/?setlang=1> – State Border Guard

http://www.baltfloodcombat.eu/index.php?option=com_content&view=article&id=22:whats-new-in-15&catid=29:the-cms – [BaltFloodCombat](#)

http://ec.europa.eu/echo/files/civil_protection/vademecum/lv/2-lv.html – [Vademecum: Country profiles - Latvia](#)

<http://www.estlat.eu/supported-projects/?project=65> – [Estonia – Latvia Programme](#)

<http://www.privireal.org/content/dp/latvia.php> - Latvia - Data Protection

Nacionālie bruņotie spēki – tehnika, available at www.mil.lv/Vienibas/Aviacijas_baze/Tehnika.aspx

<http://www.stratcomcoe.org/Organisation/FocusAreas.aspx>

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Eric K. Stern and Dan Hansén (editors), *Crisis Management in a Transitional Society: the Latvian Experience*, Eric K. Stern and Dan Hansén (editors), Elanders Gotab AB, Vällingby 2004.

Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters, United Nations International Strategy for Disaster Reduction.

International CEP Handbook 2009 - Civil Emergency Planning in the NATO/EAPC Countries, Swedish Civil Contingencies Agency (MSB), 2009.

Second Investigation Department under the Ministry of National Defence Assessment of Threats to National Security, 2014.

Stephanie Buus, Lindy M. Newlove, and Eric K. Stern (editors), *Value Complexity in Crisis Management: The Lithuanian Transition*.

Terhi Elomaa & Anna Halonen, *EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region*, November 2007.

Tiziana Bianchi, Valentina Guidi, *Comparative Survey on the National Public Procurement Systems across the PPN*, Rome, December 2010.

Terhi Elomaa & Anna Halonen, *EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region*, University of Helsinki (2007).



Driving Innovation in Crisis Management for **E**uropean **R**esilience

LITHUANIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response



Responsible Partner: CSDM (Philip Spassov, Vesselin Petkov, Todor Tagarev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The crisis management organizational structure of Lithuania is similar to the ones in Baltic Region States. It is centralised, i.e. coordinated and organised mostly by the central national civil protection authority, with limited use of private rescue services.¹⁴⁷⁴

The National Security Strategy of Lithuania establishes the basic goals and means of the national security policy. The aim of the Strategy is to provide a vision of the state's development, its national interests and the necessary actions for their implementation.

The civil protection system of Lithuania is comprised of the Government, the state and municipal institutions, economic entities, public organisations, civil protection forces such as fire and rescue, police, state border guard, medical services, public security service, state food and agriculture service, other emergency services, forces of economic entities, volunteers, the government emergency commission and emergency operation centres.¹⁴⁷⁵

The management of civil protection in Lithuania is organised at three levels – national, regional (county) and local (municipal). At national level, the Government, the Government Emergency Commission, the Emergency Management Centre, the Ministry of National Defence, the Civil Protection Department, the State Fire Prevention and Rescue Service, Ministries, and other public authorities are the main stakeholders entitled to make strategic decisions on the implementation of civil protection measures.

At county level, administrations of county governors, county civil protection departments, and county emergency management centres are responsible for organising and ensuring preparedness for emergencies as well as for assisting when necessary in their relief.

At municipal level, mayors of municipalities, civil protection departments, civil protection personnel, municipal emergency management centres, fire protection, search and rescue services, warning and information, evacuation, civil protection services and economic entities are responsible for organising preparedness for emergency situations and when required mitigate their effect.

International cooperation in Lithuania in the field of crisis management is coordinated by the Fire and Rescue Department (Figure 1, <http://www.vpgt.lt>) within the Ministry of Interior. Individual ministries and other state civil security institutions also participate in international civil protection activities.



Figure 28. Logo of the Fire and Rescue Department under the Ministry of Interior.

¹⁴⁷⁴ Terhi Elomaa and Anna Halonen, EUROBALTIC Survey: Civil Protection Research in the Baltic Sea Region. University of Helsinki, 2007, p.13.

¹⁴⁷⁵ Timo Hellenberg and Pekka Visuri, ANVIL Project Country Study: Lithuania, June 2013, p.14.

Crisis management institutions part of the civil protection and rescue system, Training Centre, other educational institutions of civil protection as well as the forces of the civil protection and rescue system are financed by the state budget, while the economic entities are financed from their own resources.¹⁴⁷⁶

Education in civil protection and rescue has a legal foundation in all of the Baltic Region countries. Basic and advanced education at the national level is standardised through the use of certificates, as well as the development of educational and training curricula. All of the Baltic region states have specialised schools and colleges which carry out education in civil protection and rescue area.¹⁴⁷⁷

¹⁴⁷⁶ Civil Protection Law, Chapter VII, article 38.

¹⁴⁷⁷ Elomaa and Halonen, EUROBALTIC Survey, p.14.

Table of Contents

LITHUANIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1028
Overview	1029
Table of Contents	1031
List of Figures	1033
List of Tables.....	1033
List of Abbreviations.....	1034
1 Policy	1035
1.1 Risk Assessment	1035
1.2 Policy and Governance	1037
1.2.1 Strategy scope and focus.....	1038
1.2.2 Monitoring and analytical support to policy making; R&D	1038
1.2.3 Policy for Prevention	1039
1.2.4 Policy for Preparedness.....	1039
1.2.5 Policy for Response	1040
1.2.6 Policy for Relief and Recovery	1041
1.3 Financing	1041
1.3.1 Investing in preparedness	1041
1.3.2 Investing in consequence management.....	1041
1.4 Policy review, Evaluation & Organisational Learning	1042
1.4.1 Post-Disaster Assessment.....	1042
1.4.2 Departmental Lessons Learned systems	1042
1.4.3 Centralised (national) Lessons Learned system	1042
1.4.4 International exchange for Lessons Learned.....	1042
1.4.5 Regular policy reviews.....	1043
1.5 Resilience	1043
1.6 Information sharing and data protection	1043
2 Legislation	1044
2.1 Crisis (emergency, disaster) management concept.....	1044
2.2 General crisis (emergency, disaster) management law.....	1044
2.3 Emergency rule	1045
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1046

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1047
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1048
2.7	Legal regulations for international engagements of first responders and crisis managers	1049
3	Organisation	1050
3.1	Organisational chart.....	1050
3.2	Organisational cooperation	1055
4	Procedures	1057
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1057
4.2	Operations planning	1058
4.3	Logistics support in crises	1058
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1059
5	Capabilities	1061
5.1	Human resources	1061
5.2	Materiel (non-financial) resources	1061
5.3	Training	1062
5.4	Procurement	1063
5.4.1	Procurement regulation	1063
5.4.2	Procurement procedures	1064
5.5	Niche capabilities	1064
	Resources	1065
	Legislative acts	1065
	Other normative acts	1065
	Official documents (white papers, strategies, etc.)	1066
	Online resources (e.g. websites of key CM organizations)	1066
	Publications	1067
	Expert interviews	1067

List of Figures

<i>Figure 1: Logo of the Fire and Rescue Department under the Ministry of Interior.</i>	<i>1029</i>
<i>Figure 2: Organisational chart of the Lithuanian crisis management structure</i>	<i>1051</i>
<i>Figure 3: Lines of coordination of the Lithuanian crisis management system. (Source EC ECHO)</i>	<i>1053</i>
<i>Figure 4: Lines of communication of the Lithuanian crisis management structure. (Source EC ECHO)</i>	<i>1059</i>
<i>Figure 5: Example of the Lithuanian online public procurement portal.</i>	<i>1063</i>

List of Tables

<i>Table 1: Index Top 10 Natural Disasters Reported.</i>	<i>1036</i>
---	-------------

List of Abbreviations

ANVIL	Analysis of Civil Security Systems in Europe (FP7 project)
CBRN	Chemical, Biological, Radiological, Nuclear
CECIS	Common Emergency Communication and Information System (of ERCC)
CFRBs	Counties Fire and Rescue Boards
CIVPRO	Baltic Sea Region Research Network for Civil Protection
DG ECHO	Directorate General Humanitarian Aid and Civil Protection
EM-DAT	The International Disaster Database (maintained by the Centre for Research on Epidemiology of Disasters)
ENSEC COE	NATO Energy Security Centre of Excellence
ERCC	Emergency Response Coordination Centre (of the EU)
ERDF	European Regional Development Fund
EU	European Union
EURATOM	European Atomic Energy Community
IT	Information Technology
LRCS	Lithuanian Red Cross Society
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organisation
SOP	Standard Operating Procedure

1 Policy

Civil security¹⁴⁷⁸ is a primary function of institutions and specialized agencies in Lithuania. Lithuania has no nation-wide specified definition of crisis situations or major emergencies.¹⁴⁷⁹ The national policy and strategy in the field of crisis management is set out by the Law on the Basics of the National Security and by the Law on Civil Protection.

1.1 Risk Assessment

Since gaining its independence in 1991 Lithuania has not faced any large scale natural or technological disasters. The occurrence of natural disasters is rather low due to the fact that climate is mild, ranging between maritime and continental. The most usual natural disasters are floods and storms as well as forest fires.¹⁴⁸⁰ An example of the types of hazards and events that has caused casualties and damages are depicted in Table 1 below.

There are also a considerable number of diverse cross-border risks affecting Lithuania. These include floods in the basin of the Nemunas River, which creates risk also to the Russian Kaliningrad district, and forest fires originating from the Russian Federation. Additionally, Baltic Sea pollution and related oil spills are regarded as a major risk factor.¹⁴⁸¹

According to Lithuanian legislation, all economic entities starting operation have to conduct a risk assessment. When referring to natural disasters municipalities and county administrations are responsible for preparing risk assessments. In relevant responsible institutions hazards are evaluated and mapped according to their field of activities and responsibilities.

Risks and threats to the national security of Lithuania are defined by the National Security Strategy which is approved by a resolution of the Parliament.

The Strategic Research and Analysis Centre was established by the Government with the aim of analysing and forecasting changes in the external and internal security environment, analysing the occurrence and development of threats, dangers and risks and submitting proposals to the Parliament, the President of the Republic, the State Defence Council and other institutions engaged in ensuring national security.¹⁴⁸²

The Fire and Rescue Department under the Ministry of Internal Affairs, working in close cooperation with data and assessments provided by ministries and other national institutions, prepare the Lithuanian National Risk Analysis. The document is drafted in accordance with the provisions of the European Commission working paper on “Risk Assessment and Mapping Guidelines for Disaster Management.” When finalised, the analysis is submitted to the European Commission.¹⁴⁸³

¹⁴⁷⁸ See, for example, Bengt Sundelius, “A Brief on Embedded Societal Security,” *Information & Security: An International Journal* 17 (2005): 23-37.

¹⁴⁷⁹ ANVIL Project Country Study: Lithuania, p.9

¹⁴⁸⁰ ANVIL Project Country Study: Lithuania, p.8.

¹⁴⁸¹ ANVIL Project Country Study: Lithuania, p.8.

¹⁴⁸² Law on Basics of National Defence, Part II, Chapter 9.

¹⁴⁸³ Source: <http://www.vpgt.lt/index.php?1114501839> (30 October 2014).

Table 17: Index Top 10 Natural Disasters Reported.¹⁴⁸⁴**Affected People**

Disaster	Year	Affected people
Storm	1993	780,000
Extreme temp.	2001	
Storm	2005	
Flood	2005	
Drought	2006	
Extreme temp.	2010	
Flood	2010	
Drought	1992	
Storm	1999	
Extreme temp.	1999	

Casualties

Disaster	Year	People killed
Extreme temp.	1999	32
Extreme temp.	2001	20
Storm	1993	6
Extreme temp.	2010	5
Flood	2010	4
Storm	1999	2
Storm	2005	0
Flood	2005	0
Drought	2006	0
Drought	1992	0

Economic Damages

Disaster	Year	Cost (US\$ X 1,000)
Drought	2006	225,573
Drought	1992	52,900
Storm	2005	30,000
Storm	1993	4,600
Storm	1999	500
Extreme temp.	2001	0
Flood	2005	0
Extreme temp.	2010	0
Flood	2010	0
Extreme temp.	1999	0

The Register of hazardous objects is one of the information management systems that are gradually being developed in Lithuania. It consists of the main database, managed by the Civil Protection Department of the Ministry of National Defence and the counties database, which is managed by the counties' Civil Protection departments. This data basis contains information on all the hazardous objects that might threaten the population in case of an emergency.

There are several governmental regulations regarding conducting risk assessments such as: Resolution no. 1558 concerning the procedure for approval and management of flood risk assessment (2009); and Resolution no. 1212 on the Rescue, Search and Emergency Work, Events, Extreme Events and Extreme Situations and Liquidation of their Consequences (2010).

¹⁴⁸⁴

Extracted from The International Disaster Database (EM-DAT), maintained by the Centre for Research on Epidemiology of Disasters at <http://www.emdat.be/database>.

Further, the Provisions on Major Industrial Accidents Prevention and Consequences Liquidation, approved in 2004 by the Lithuanian government, were prepared according to the SEVESO II Directive,¹⁴⁸⁵ as well as to the Lithuanian Civil Protection Law. In addition, risk-mapping in Lithuania has included possible accidents at chemical and other sites.¹⁴⁸⁶

1.2 Policy and Governance

The management of civil protection in Lithuania is organised in three levels - national, regional (county) and local (municipal).

The Prime Minister has the lead role at national level for the management of the civil protection operations. Other key responsible actors include the chief executive officers of ministries, departments and other public administration bodies and county governors, and in exceptional circumstances - directly to mayors of municipalities.¹⁴⁸⁷ The model of the crisis management framework in Lithuania could be described as centralised. It is mainly managed by the Government and the Ministry of Interior. At national level, the key civil protection objective is to ensure emergency preparedness and the capability development at all levels of the civil protection management system, in order to meet the main requirements for national security and civil protection in emergencies, encompassing response and recovery after emergencies.¹⁴⁸⁸

At regional (county) level, the county governors, county civil protection departments and county crisis management centres organise preparedness for emergencies and assist in the response in such situations.

At municipal level, the municipal administrators, civil protection departments, which include divisions and services, civil protection personnel, municipal emergency management centres and other civil protection entities organise preparedness for emergencies and, when necessary, respond thereto.

The Law on Basics of National Defence outlines that the crisis management system has to be created and developed to forecast and monitor emergencies and events that pose threat, in order to prepare and implement preventive measures, as well as to respond to, determine and manage crises. In addition a crisis management strategy has to be approved by the Government.

The Government Emergency Commission, formed by the Government and chaired by the Prime Minister, has the responsibility for the coordination of crisis management. The Committee consists of the main ministers responsible for crisis management, the Chancellor of the Prime Minister or First Deputy thereof. The Commission, with the approval of the Government, has the authority to call for establishment of Joint Coordination Centre consisting of representatives of appropriate ministries and other state institutions for the coordination of crisis management and response. Crisis management is regulated by laws and other legal acts.¹⁴⁸⁹

The main purpose of the civil protection and rescue system is the protection of the population from threats during war and in peacetime. The system has to ensure the readiness of all the rescue ser-

¹⁴⁸⁵ Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances.

¹⁴⁸⁶ ANVIL Project Country Study: Lithuania, p.18.

¹⁴⁸⁷ Civil Protection Law, Chapter IV, article 19.

¹⁴⁸⁸ ANVIL Project Country Study: Lithuania, p.12.

¹⁴⁸⁹ Law on Basics of National Defence, Part II, Chapter 14, Section II.

vices and their preventive actions and, in the event of emergencies, natural disasters, provide necessary emergency assistance and evacuation from the regions at risk.

In order to deal with large-scale disasters and to carry out rescue and emergency response operations military forces, specialists from the reserve, ministries, other state and municipal institutions and bodies, volunteer organisations, as well as other resources available could be involved. The conditions and procedures for their employment and participation in operations are defined by law.¹⁴⁹⁰

1.2.1 Strategy scope and focus

The key national documents in the field of crisis management are defined in accordance with the law of the Republic of Lithuania on the Basics of the National Security and the Law of the Republic of Lithuania on Civil Protection. The civil security system of Lithuania has mainly been developed over the past two decades, more precisely since the independence of the country, to reach sufficient preparedness and readiness to protect its population, property and environment using its resources.¹⁴⁹¹

1.2.2 Monitoring and analytical support to policy making; R&D

Lithuania conducts extensive scientific research in the area of civil security and crisis management. The Lithuanian Fire and Rescue Department was one of the key initiators of the CIVPRO civil protection network, established in 2006 by the EUROBALTIC II project for civil protection, as part of the EUROBALTIC Programme for Civil Protection, initiated by the Council of the Baltic Sea States.¹⁴⁹²

The CIVPRO network conducted studies addressing research questions in civil protection, risk management and emergency preparedness. The project performed high quality research using state-of-the-art experimental approaches and risk mapping technologies. It also built a web-based knowledge database for disseminating accurate and detailed definitions of various risks in the Baltic region. The project also promoted collaboration with experts within and beyond the network in civil protection, risk management and emergency preparedness fields of expertise (see section 3.2 for further information on international cooperation activities).¹⁴⁹³

The Fire Research Centre, under the Fire and Rescue Department of the Ministry of Interior, is a body investigating the cause of fires, performing technical expertise in fire, fire testing, developing normative and methodological documents. The Centre provides also methodological support to the formulation of fire protection policies. Each year, the Fire Research Centre conducts about 500-700 fire tests and surveys. It tests and evaluates building products, coatings, fire equipment, fire protection materials, electronics, pyrotechnics, and even toys. The tests are carried out in accordance with international standards and Lithuanian methods.

In Lithuania, academic and research communities cooperate with national or local institutions in the field of disaster reduction on ad hoc basis. Besides public entities and universities, there are private entities which participate in EU funded research programmes and projects.

¹⁴⁹⁰ Ibid., Chapter 21.

¹⁴⁹¹ ANVIL Project Country Study: Lithuania, p.32.

¹⁴⁹² Ibid., p.27.

¹⁴⁹³ Ibid., p.27.

1.2.3 Policy for Prevention

The main objective of Lithuania's Crisis Management System is to prevent crises by collecting information regarding on-going processes, analysing them and informing the superior authorities about the current situation, possible threats, as well as submitting proposals related to actions and operations required for managing crises. The Crisis Management System also maintains the readiness of the necessary integral infrastructure and keeps in preparation all the offices, institutions and procedures necessary for control of crisis management actions and operations.¹⁴⁹⁴

The Crisis Management System incorporates forecasting, prevention and control of a wide range of threats. The Lithuanian White Paper on Defence Policy especially pays attention to the importance of expanding the mechanisms for crisis forecast and prevention in order to enable detection of a crisis at an early stage. The Crisis Management System is designed at three levels:

- strategic: President, Prime Minister and ministers;
- operational: Emergency Management Centre;
- tactical: operational crisis management offices in all ministries and departments.

Crisis prevention and preparedness for crisis management is coordinated by the Office of the Prime Minister. The Office coordinates the drafting of integral crisis and emergency prevention and management plans and measures, while the ministries and other state institutions prepare similar plans and measures within the sphere of their competence providing for action and coordination with other institutions.¹⁴⁹⁵

The tasks of the Emergency Management Centre include performing and monitoring of risk factors and threats, forecasting possible crises; coordinating activities of state institutions and entities within the crisis prevention area; ensuring the operation of crisis management infrastructure and constant exchange of information on crisis management between institutions; and to develop international cooperation within the field of crisis management.¹⁴⁹⁶

1.2.4 Policy for Preparedness

Civil emergency preparedness is a key national function that directs the elaboration and implementation of preparedness and response measures undertaken by public institutions, local authorities and the private sector. An example of a preparatory work in the case of a natural disaster and for a response operation has been the flooding of the Lithuanian Nemunas River. Due to rainfalls river levels reach devastating levels approximately every 12-15 years, thus submerging vast territories of about 50,000 hectares in the regions of Klaipeda and Taurage with over 50 villages and 700 farms in areas populated by around 4,000 inhabitants. The most recent emergency event occurred in 1994 when 40,000 hectares were flooded and 19 villages, 168 farms and over 600 persons were affected. The Nemunas flooding resulted in improvements in the preparedness and response mechanisms of the Lithuanian civil security system in general. A permanent programme of preparedness to flooding and effects elimination has been established with the aim of reducing the effects and economic losses caused by floods. The Nemunas case has been an example of civil-military cooperation as the Lithuanian Army has taken active part in the rescue and response efforts in cooperation with the SFRS. Also

¹⁴⁹⁴ White Paper 2002, Lithuanian Defence Policy, pp.9-10.

¹⁴⁹⁵ Law on Basics of National Defence, Part II, Chapter 14, Section II.

¹⁴⁹⁶ White Paper 2002, Lithuanian Defence Policy, pp.9-10.

the national defence voluntary forces have accomplished some reconnaissance missions and air rescue operations.¹⁴⁹⁷

The overall responsibility for the status of the civil protection system, as well as for evaluating the preparedness of the state and municipal institutions, is held by the governmental Emergency Commission. The Government Emergency Commission is the main operational body of the civil security system in Lithuania and is technically assisted by the Fire and Rescue Service. There are two levels at which the emergency commission is established: at governmental and municipal levels. It submits proposals to the government related to the use of civil protection supplies of the State Reserve in the event of an emergency. The Commission facilitates discussion on the state of the civil security system, evaluates the preparedness of state and municipal institutions and other agencies for emergency response and takes measures to improve it. It is also in charge of government level information sharing and situational awareness.

The municipal Emergency Commission is responsible for the municipal civil protection system as well as for the preparedness and response actions during a crisis situation. It also submits requests to the Fire and Rescue Department regarding the use of civil protection supplies of the state in crisis events. In Lithuania there are 60 municipal Emergency Commissions which are also responsible for informing the public about the actual emergency and related response mechanisms.

*The state commander of operations will be appointed by the prime minister from the government cabinet, and the national operations centre will be convened. It is important to point out here that the relationship between ECs is based on the principle of supremacy of decisions: the municipal level EC is the lowest level and the government EC the highest level.*¹⁴⁹⁸

1.2.5 Policy for Response

Depending on the scope of the emergency there are two levels of emergency situations - national and municipal. In cases of emergency within a single municipality, the response to such a crisis is managed with forces of the civil protection system located within a municipality with the material resources held at the disposal of the municipality or obtained from other municipalities. In cases that the emergency covers territory that affects more than three municipalities it is categorised as national level emergency.

If an emergency has occurred within the territory of a single municipality then a local municipal Emergency Commission will be formed. The head of the municipal administration has to appoint a municipal operations commander and the municipal operations centres will be convened. The head of the municipal administration is also responsible for carrying out a response of the civil security system within the municipality. He/she declares and terminates a municipal level of emergency and organizes municipal level civil protection exercises, organizes search and rescue operations and mobilizes other forces of the civil protection system. Respectively, in case of national level emergency a government Emergency Commission will be convened.¹⁴⁹⁹

Furthermore, in peacetime part of the obligations of the Lithuanian Armed Forces is to ensure of the national security. The Lithuanian Armed Forces together with the institutions supporting them have to be ready to respond to military and non-military threats and emergencies occurring in the country

¹⁴⁹⁷ ANVIL Project Country Study: Lithuania, p.18-19.

¹⁴⁹⁸ ANVIL Project Country Study: Lithuania, p.17.

¹⁴⁹⁹ ANVIL Project Country Study: Lithuania, p.19-20.

in peacetime. In order to achieve such support and readiness to assist state or municipal institutions, the Armed Forces develop capabilities for effective and coordinated intelligence activities that allow the identification of a potential crisis at an early stage and application of preventive measures against the spreading of the crisis. In addition, in case of extreme situations and a state of emergency, the Armed Forces provide assistance to state and local municipal institutions if capabilities of these institutions are limited; and ensure security and defence of the national cyber space by contributing to the response to mass cyber-attacks carried out against Lithuanian public authorities and critically important entities.¹⁵⁰⁰

1.2.6 Policy for Relief and Recovery

The Government Emergency Commission organises emergency prevention and direct emergency relief actions where the territory of one or more counties is affected or where there is a need for assistance from public administration bodies for forces and material resources necessary for mitigation of the effects an emergency.

Lithuanian legislation foresees not only preparedness of state institutions and population for emergencies but also their active participation in reducing the consequences and engaging in recovery activities. Responsibility for recovery activities is held primarily by the municipal authorities. In cases where the available resources are insufficient, municipalities may require assistance from the government. Owners of private enterprises are obliged to establish emergency management units on stand-by preparedness for mitigation of consequences according to the contingency plans.¹⁵⁰¹

1.3 Financing

1.3.1 Investing in preparedness

Crisis management institutions part of the civil protection and rescue system, training centre, other educational institutions of civil protection as well as the forces of the civil protection and rescue system are financed by the state budget, while the private entities are financed from their own resources.¹⁵⁰²

1.3.2 Investing in consequence management

The government is the main provider of financial support to affected entities in case of natural disasters. In cases when material resources owned by legal and natural persons are used in the mitigation of disaster effects they have to be compensated by the Government accordingly.¹⁵⁰³

The resources for recovery activities are primarily taken from the objects, usually the economical entities, and in case they are not sufficient, from municipalities or the government.¹⁵⁰⁴

The compensation of damages and losses caused by natural disasters, expenses of rescue and mitigation of the effects to natural and legal persons is provided in the manner prescribed by the Government.¹⁵⁰⁵

¹⁵⁰⁰ Military Strategy of the Republic of Lithuania, approved November 22, 2012

¹⁵⁰¹ ANVIL Project Country Study: Lithuania, p.28

¹⁵⁰² Civil Protection Law, Chapter VII, article 38

¹⁵⁰³ Ibid., Chapter VII, article 38

¹⁵⁰⁴ ANVIL Project Country Study: Lithuania, p.28

Furthermore, Lithuania receives funding through the Latvia – Lithuania Cross Border Cooperation Programme (see 3.2 for cross border cooperation). 19 projects are approved for funding according to this Programme. Additionally, the projects part of the Programme requested around EUR 28 million co-financing from the European Regional Development Fund (ERDF).

Some of the approved projects include:

- “Common Fire and Rescue Service Response System on the Border” for the creation of joint fire fighting rescue service response system in the Lithuanian and Latvian border, aimed to operatively accumulate fire fighting rescue forces responding to incidents and extreme situations;
- “Continuance of Latvia-Lithuania cross-border cooperation in protection of population and environment,” which is aimed at fostering creation of effective cross-border cooperation in emergency situations, thus improving safety of citizens on both sides of the border;
- “Creation of disaster management system in neighbouring regions of Latvia and Lithuania, Phase II,” which facilitates the implementation of three main priorities set forth in the Strategy of the Programme: Legal and institutional development, Establishment of data exchange system in risk management and Development of risk management infrastructure thus ensuring accessibility, quality and effectiveness of disaster management and emergency recovery services in Latvia and Lithuania by year 2015.¹⁵⁰⁶

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Information and indications of related to post-disaster assessment is not found in policy, legislative or research documents in the crisis management domain, and could not be obtained within the given timeframe.

1.4.2 Departmental Lessons Learned systems

Information on of such systems is not found in policy, legislative or research documents in the crisis management domain as it is intra-agency specific, and could not be obtained within the given timeframe.

1.4.3 Centralised (national) Lessons Learned system

In the process of regular risk assessment at national level, the decisions taken by state and municipal authorities are analysed in respect of their contribution to mitigate the risks and threats to national security.

1.4.4 International exchange for Lessons Learned

Such information is not found in policy, legislative or research documents in the crisis management domain, and could not be obtained within the given timeframe.

¹⁵⁰⁵ Civil Protection Law, Chapter VIII, article 41

¹⁵⁰⁶ http://www.latlit.eu/eng/news/19_projects_will_receive_cofin/_gv/print_1, last accessed 24.10.2014

1.4.5 Regular policy reviews

The Fire and Rescue Department under the Ministry of the Interior in accordance with the emergency prevention procedures set out in resolution No. 1028,¹⁵⁰⁷ approved by the Lithuanian government in 2010, prepares an annual review that analyses and summarizes the information obtained regarding the national civil protection system, the emergency preventive and preparedness measures of the state.¹⁵⁰⁸

Governmental regulations and resolutions that outline the conduct of regular policy reviews include resolution No. 966 regarding the prevention, elimination and investigation, government resolution No. 924 approved in 2009 on monitoring carried out (Official Gazette, 2009, no. 103-4322) and resolution No. 404 for regulatory monitoring (Official gazette 2009, no. 59-2294).¹⁵⁰⁹

1.5 Resilience

The term Resilience is not used in Lithuanian policy or legislative documents. Over the course of this study no information has been found within the academic domain referring to the resilience concept addressing crises, disasters, crisis management or other related topics.

1.6 Information sharing and data protection

The tasks of the Emergency Management Centre include constant exchange of information on crisis management between institutions and developing international cooperation in the field of crisis management. In addition, the Centre, while implementing the tasks assigned to it, collects and analyses information received from the national authorities, mass communication and news agencies regarding threats and ensures the protection of information representing a state or official secret.¹⁵¹⁰

The role of the society and citizens of Lithuania in crisis management is increasing due to the introduction and use of high-technologies. *The citizens' role is growing in terms of coherent risk awareness but also in terms of producing items for the authorities' situational awareness.*¹⁵¹¹ There are a number of IT related projects where risk information is collected and analysed through internet, social media and text messages. In Lithuania, citizens are considered as a valuable source of civil protection data that is being processed and stored into databases.¹⁵¹²

¹⁵⁰⁷ Resolution No. 1028 on the approval emergency prevention procedures, 14 July 2014.

¹⁵⁰⁸ <http://www.vpgt.lt/index.php?-1476599038> (22 October 2014).

¹⁵⁰⁹ <http://www.vrm.lt/lit/Teisinio-reguliavimo-stebesena-/227> (29 October 2014).

¹⁵¹⁰ White Paper 2002, Lithuanian Defence Policy, pp.9-10.

¹⁵¹¹ ANVIL Project Country Study: Lithuania, p.23.

¹⁵¹² Ibid., p.23.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The National Security Strategy of Lithuania establishes the basic goals and means of the national security policy. The aim of the Strategy is to provide a vision of the state's development, its national interests and the necessary actions for their implementation.

The Strategy defines the basic goals of specialised strategies and doctrines in relevant areas of state policy. These strategies have to be based on the provisions of the National Security Strategy and must be revised every time the National Security Strategy of Lithuania is updated.

Conflict prevention is one of the main priorities listed in the National Security Strategy, in particular participating in international crisis management and establishing policies and legislation to address new security challenges, dangers, and threats.

Additionally, the Strategy foresees cooperation with NATO Member states to further strengthen regional security within the Baltic region, in order to consolidate the national security system of the Republic of Lithuania and reinforce national and international crisis management capabilities. The Strategy also highlights the readiness of Lithuanian forces to participate in international peace operations, crisis management and prevention.

The Strategy also underlines the importance of the establishment of crisis management system in Lithuania in order to ensure effective detection and prevention of threats, as well as the national security in the area of crisis management. The system is being established to function in the pre-crisis situations, ensuring comprehensive monitoring of dangerous situations and threats, crisis detection, preparation and implementation of preventive measures.

The main means and measures for improving crisis management and response capabilities include: enhancing the preventive role of the crisis management system for detecting and eliminating emergency situations and threats; establishing civil safety and rescue institutions for managing crisis situations and to ensure immediate emergency aid in the case of fire, industrial disaster or another incident.¹⁵¹³

2.2 General crisis (emergency, disaster) management law

The Civil Protection Law of Lithuania establishes principles for the organisation and operation of the civil protection and rescue system, along with the duties and rights of state and municipal institutions, economic entities, public organisations and residents.¹⁵¹⁴

The goals of the civil protection and rescue system include guaranteeing the optimum use of state resources in order to ensure public security, maintain the operability of the national economy, localise the emergency areas and mitigate the effects thereof; preparing the public for practical actions in the event of an emergency and strengthen the confidence in the civil protection and rescue systems.

¹⁵¹³ National Security Strategy of Republic of Lithuania, 2002, amended 26 June 2012.

¹⁵¹⁴ Civil Protection Law, Chapter I, art. 1.

For the implementation of the goals and tasks the civil protection institutions has to be guided by the principles for the organisation and functioning of the system. The key principles for the organisation and functioning of the rescue system include territorial, differentiation, compulsiveness, transparency, constant readiness and interoperability.¹⁵¹⁵ The territorial principle refers to national scale organisation of the civil protection, embracing the entire population as well as foreign nationals located in the territory of Lithuania. The differentiation principle that the civil protection measures and preparedness for rescue operations will be performed in individual administrative units taking into account the level, scope of danger of the emergency anticipated within the territories of the state. By compulsiveness it is meant that civil protection measures are obligatory to all institutions of public administration and local government, all economic entities and residents. The transparency principle refers to the activities of public administration and local government institutions in the sphere of civil protection that need to be transparent to the public and the mass media. The institutions and forces of civil protection and rescue system must be in constant readiness to act in emergency conditions. The interoperability principle covers the effectiveness of civil protection measures and actions in emergency situations, which has to be ensured by coordinating the interoperability plans and management system of the public administration and local government institutions, civil protection and rescue system forces, the Lithuanian Armed Forces, medical institutions and other services.

Civil protection and rescue system institutions are guided by the Constitution of Lithuania, laws and other legal acts enacted by the Parliament, decrees of the President of the Republic, Government resolutions, Prime Minister's ordinances, orders of the National Defence Minister and international treaties to which the Republic of Lithuania is a party.¹⁵¹⁶

Other Lithuanian Government resolutions in the crisis management domain include:

- Resolution No. 551, dated 8 November 2000;
- Resolution No. 1386 regarding dangerous objects of national significance, dated 2010;
- Resolution No. 512, dated 4 May 2010;
- Resolution No. 555, dated 4 May 2004;
- Resolution No. 966 regarding the prevention, elimination and investigation approval of the regulations, dated 2010;
- Resolution No. 1108 on the procedure of Lithuanian Republic's civil protection system readiness levels, dated 2010;
- Resolution No. 1212 on the procedure of the organization of rescue, search and emergency work, events, disaster and emergency liquidation and elimination of their consequences, dated 2010;
- Resolution No. 1213 on the formation and organization of emergency operations centers;
- Resolution No. 1502 on procedure for population evacuation, dated 2010;
- Resolution No.1503 regarding the State Emergency Management Plan 2010.¹⁵¹⁷

2.3 Emergency rule

Declaring an emergency is a responsibility of the Government. In addition to that, the Government is also in charge of terminating a national level of emergency, establishing the procedure for organizing rescue, search operations and urgent actions and responding to emergencies and mitigating their

¹⁵¹⁵ Ibid., Chapter I, art. 6

¹⁵¹⁶ Civil Protection Law, Chapter I, art. 7

¹⁵¹⁷ <http://www.vpgt.lt/index.php?-1747337895>, last accessed 29.10.2014

consequences. The government is in charge of evacuation measures, as well as providing shelters and other collective protection mechanisms in Lithuania.¹⁵¹⁸ The Lithuanian defence forces and volunteers can provide assistance in crisis situation when required.¹⁵¹⁹

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The key duties and functions of the public administration and local government institutions as well as economic entities in the sphere of civil protection are as follows.

The Government is responsible for drawing up civil protection and rescue system development programmes and submitting them to the Parliament for approval; for developing the procedure for implementing civil protection and rescue system priority development trends; for establishing the emergency prevention procedure; approving the levels of civil protection preparedness, emergency criteria; approving national level plans of civil protection emergency preparedness; establishing the procedure for using the material resources in case of an emergency as well as the composition of state reserve technical means, food, clothing, the size of the reserve, etc.; preparing the civil protection training procedure; notifying the President and the Parliament about emergencies, their consequences and causes, and in support of the declaration of an emergency situation.¹⁵²⁰

The Ministry of National Defence in peacetime has to implement, in cooperation with other institutions, the Government's policy in the area of civil protection, to coordinate the activities of civil protection and rescue system institutions in accomplishing the tasks assigned to their competence.

In addition, the Ministry of National Defence has the responsibility for specifying the procedure for notifying the Emergency Management Centre of emergencies; approving the needs for shelters and other collective protection structures, the norms and procedure of provision of the population with individual means of protection; approving the plans of the national level civil protection exercise and the annual plan for the enrolment of students in the civil protection training centre; approving the annual plan of activities of its Civil Protection Department; and presenting to the Government generalised information on the state of the civil protection and rescue system.¹⁵²¹

The Civil Protection Department under the Ministry of the Interior is an essential part of the civil protection and rescue system, directing the activities of the civil protection and rescue system, organising the prevention of emergencies, coordinating the activities of public institutions and economic entities in the sphere of civil protection and planning the national preparedness for the implementation of civil protection tasks in case of emergencies in time of peace and in wartime.¹⁵²²

The tasks assigned to the Civil Protection Department include informing state institutions, economic entities and the population of a national-scale threat in case of an emergency; planning of measures to ensure the optimum use of state resources, localisation of emergency area and for mitigation of the effects of the crisis; compiling the register of objects of national significance which are potentially hazardous; controlling the activities of the civil protection and rescue system; organising the preparedness of public administration institutions and the community for actions in case of an emergency; and organising and directing the national level civil protection exercise.

¹⁵¹⁸ ANVIL Project Country Study: Lithuania, pp.13-14.

¹⁵¹⁹ Ibid., p.29.

¹⁵²⁰ Civil Protection Law, Chapter II, art. 8.

¹⁵²¹ Ibid., art. 9.

¹⁵²² Ibid., art. 10.

The State Fire Prevention and Rescue Service is part of the Civil Protection and Rescue System maintaining constant readiness and commands for the extinguishing fires, search and rescue as well as providing first aid in emergencies. The State Fire Prevention and Rescue Service is subordinate to the Fire Prevention and Rescue Department under the Ministry of the Interior.

The State Fire Prevention and Rescue Service carries out state supervision of fire prevention and its tasks include fire prevention and guaranteeing of the availability of technical and organisational measures for extinguishing fires. The work of state fire prevention supervision is organised in compliance with the regulations approved by the Government.

The activities of ministries and other institutions in the civil protection domain are directed by their chief executives or persons authorised by the chief executives. The most important tasks of ministries and other authorities include: organisation of civil protection according to the type of activity and competence assigned to them; approval of regulations of the emergency management centre of ministry or other institution of state administration, as well as plans of emergency preparedness upon coordination with the Civil Protection Department; building of departmental reserves of supplies and funds in order to increase the stability of functioning and security under emergency conditions; organisation of training in civil protection for the chief executives and experts; drawing up plans of emergency preparedness of civil protection; coordination of the planning of civil protection measures; and conducting a yearly analysis of the state of emergency preparedness of civil protection and submitting it to the Civil Protection Department.¹⁵²³

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The County Governor is the lead authority in civil protection of the county. His/hers responsibilities are defined by the Civil Protection Law and include:

- to be responsible for civil protection preparedness in the county;
- to organise the drawing up of plans of emergency preparedness of civil protection in the county;
- to warn the public and local authorities, economic entities, the population of the imminent emergency;
- to obtain from all district municipalities information necessary for the implementation of civil protection tasks;
- in the event of emergencies to organise and implement preventive measures of civil protection within the territory of the administrative unit;
- to notify the Civil Protection Department of the emergencies which have occurred;
- to make arrangements to mitigate the emergency effects, organise supply of search and rescue operations;
- to control the preparedness of executive bodies of municipalities to avoid the likely consequences of emergencies or to mitigate the effects thereof;
- to request support from the Government for aid in case when available resources and forces prove to be insufficient;

¹⁵²³

Civil Protection Law, Chapter II, art.12.

- to perform a yearly analysis of the state of emergency preparedness of civil protection and submitting it to the Civil Protection Department.¹⁵²⁴

The Mayor of a district or city has the following responsibility for crisis management:

- to be responsible for the preparedness of civil protection within the territory of the municipality;
- to organise development of a plan of preparedness of civil protection in the event of emergencies; warn public authorities, economic entities, and the population about the scope and possible effect of the emergency;
- prescribe tasks and functions of civil protection for administrative units of the municipality, approve plans of civil protection emergency preparedness; to organise training of civil protection forces.

Further, the Mayor has to implement preventive measures for civil protection, rescue and other urgent tasks, mitigate the effects of emergencies, evacuate the population and to organise civil protection training of the population; to collect information from all the economic entities within the territory of the municipality necessary for carrying out the tasks of civil protection; to notify the district governor about emergencies within the municipality territory; to mobilise all civil protection forces within the municipality for mitigation of the emergency; to analyse the state of civil protection and submit an annual report about it to the county governor in the manner prescribed by him.

The Civil Protection Law also sets out the obligations of the Manager of an Economic Entity or an Institution in emergency situations. The manager of an economic entity or an institution has the responsibility to ensure the civil protection preparedness at the entity he is in charge of; to warn and inform the personnel about the imminent danger; project emergencies and plan preventive measures; develop plans of civil protection emergency preparedness; and to provide the personnel with individual and collective protection equipment; organise evacuation of the employees, first-response rescue operations and be in charge of them.

Public organisations may be called to take part in organising state civil protection measures for elimination of the consequences of emergencies and to provide assistance to victims in cooperation with the municipal civil protection service units.¹⁵²⁵

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The Lithuanian civil security system involves non-profit relief organisations across national, county and municipal levels and fields of civil security. However, their role is more visible and documented in relation to response operations than in the field of prevention and preparedness.

The Civil Protection Law regulates the role of non-profit organisations in prevention, preparedness, response and mitigation of emergencies. The municipalities reach agreements with NGOs, for example the Lithuanian Red Cross, for emergency mitigation activities.¹⁵²⁶

The Lithuanian civil security system consists of a single fire and rescue forces: the State Fire and Rescue Service, local fire departments, departmental forces and voluntary fire formations. The Fire

¹⁵²⁴ Civil Protection Law, Chapter II, art.13.

¹⁵²⁵ Ibid, Chapter II, art.17.

¹⁵²⁶ ANVIL Project Country Study: Lithuania, p.27.

Safety Act defines the participation of Lithuanian residents in fire safety, as well as the creation and consolidation of the voluntary fire formations.¹⁵²⁷

2.7 Legal regulations for international engagements of first responders and crisis managers

Decisions on the participation of elements of the Lithuanian military forces in international military operations shall be taken by the President of the Republic and the Parliament in accordance with the procedure are laid down in the Constitution and the laws.¹⁵²⁸

The Law on International Operations, Military Exercises and other Events, adopted in July 2000, defines the participation of Lithuanian Army units in international exercises, and other international military co-operation events and also, in international operations abroad as well as participation of foreign states military units in international exercises and other international military co-operation events conducted on the territory of Lithuania.

The Law defines the participation of Lithuanian Army units in international rescue and humanitarian operations. The President takes the decision on the use of Lithuanian army units in international rescue and humanitarian operations and has to submit such a decision for approval to the nearest sitting of the Parliament.

Internationally the Lithuanian Government has implemented Council Decision 2007/779/EC, EURATOM on the establishing of Community Civil Protection Mechanism.¹⁵²⁹

Lithuania has entered into bilateral and multilateral agreements with the Baltic and Nordic countries with which it shares land and maritime borders and are close to the strategic and operational sphere of the Lithuanian civil security system. Lithuania, Estonia and Latvia signed bilateral agreements since 1992. In 1993 Lithuania signed an agreement with the Swedish Rescue Services Agency.

In 1998, similar agreements were signed with Finland, Denmark and Ukraine. In 2000, the Lithuanian fire and rescue service signed an agreement with the fire service of Hamburg Meckelburg-West Pomerania. This was an interregional agreement. In 2002, agreement was made with the Emergency Ministry (EMERCOM) of Russia. Further and additional bilateral agreements have been made with Belarus (2003), Poland (2003), Sweden (2003), Hungary (2001), Latvia (2001), Ukraine (2003) and Germany (1994). Also agreements with Czech Republic (2004), Georgia (2008) and Azerbaijan (2010) have been signed. There is also a separate agreement with the Pennsylvania Emergency Management Agency (2007).

¹⁵²⁷ <http://www.vpgt.lt/go.php/lit/Bendra-informacija/1121> (30 October 2014).

¹⁵²⁸ Law on the Basics Of National Security, Chapter 8.

¹⁵²⁹ http://ec.europa.eu/echo/files/civil_protection/vademecum/lt/2-lt-1.html (30 October 2014).

3 Organisation

3.1 Organisational chart

The main tasks of the Civil Protection and Rescue System in Lithuania, depending on the causes, the type and threat of the emergencies, encompass:

- warning the population of the emergency, the possible effects and the necessary measures to mitigate these effects;
- undertaking emergency prevention;
- organising the supply of the population with collective protection equipment;
- carrying out reconnaissance and mapping of the hazard area, rescue and other urgent operations;
- providing medical aid and carrying out public healthcare in case of emergencies;
- evacuating the people and property from risk territories;
- organising the restoration of disrupted critical infrastructure and services;
- creating stockpiles with essential supplies;
- making arrangements for the training for emergencies of chief officers, personnel, civil protection and rescue system forces and the population;
- investigating and analysing the causes of emergencies.

To perform these tasks, the Civil Protection and Rescue System of Lithuania is comprised of:

- Government Emergency Commission;
- the Emergency Management Centre;
- Civil Protection Department under the Ministry of National Defence;
- State Fire Prevention and Rescue Service;
- Fire protection, search and rescue;
- other territorial population warning and information, evacuation and civil protection services of ministries;
- other institutions of public administration and local government municipalities;
- civil protection and rescue system bodies of economic entities;
- environment monitoring and laboratory control network.¹⁵³⁰

As shown in Figure 2 below, the civil protection system of Lithuania is managed and organised at three levels: national, county and municipal.

At national level, the key actors are the Government, the Government Emergency Commission, the Ministry of the Interior, the Fire and Rescue Department under the Ministry of the Interior and the subordinated agencies, ministries and other state institutions make strategic decisions regarding the implementation of civil protection measures.

At county level, the system is organised by county governors, county civil protection departments and county emergency management centres.

At municipal level, municipal administrators, civil protection departments, civil protection personnel, municipal emergency management centres, fire prevention and other civil protection services, eco-

¹⁵³⁰ Civil Protection Law, Chapter I, art. 3.

conomic entities and agencies are responsible for the organisation of preparedness for emergencies and the response to such events.

Departmental emergency management centres are to be established at the ministries and other public administration institutions. Emergency management centres are to be formed under the office of the county governor and the district (city) mayor. Permanent civil protection staff has to be employed at all potentially hazardous facilities.¹⁵³¹

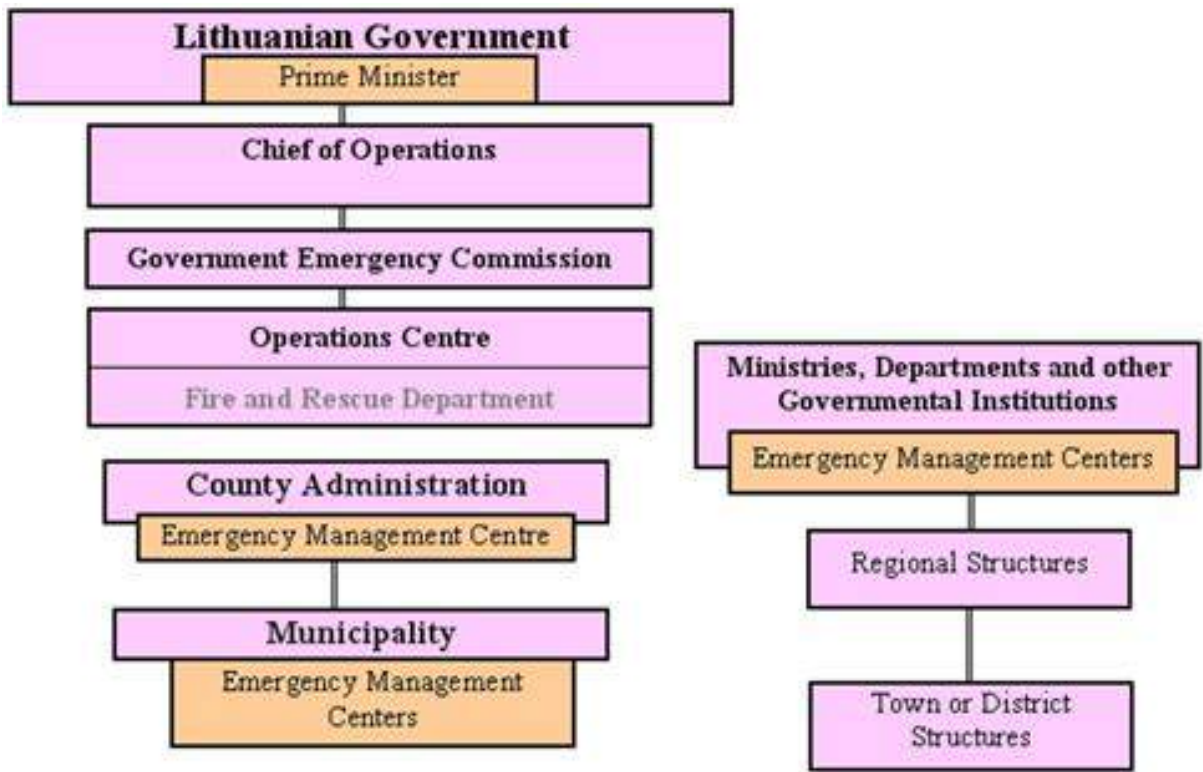


Figure 29: Organisational chart of the Lithuanian crisis management structure

Figure 1. Logo of the Fire and Rescue Department under the Ministry of Interior. 1029

Figure 2: Organisational chart of the Lithuanian crisis management structure 1051

Figure 2: Lines of coordination of the Lithuanian crisis management system. (Source EC ECHO) 1053

Figure 2: Lines of communication of the Lithuanian crisis management structure. (Source EC ECHO) 1059

Figure 2: Example of the Lithuanian online public procurement portal. 1063

1532

The Government Emergency Commission is a permanent Government commission responsible for organising emergency prevention and direct emergency relief actions in cases where an emergency encompasses the territory of one or more counties or where there is a need for assistance from public administration bodies for rallying without delay forces and material resources necessary for mitigation of the effects of an emergency. The composition of the Emergency Commission and its regulations are approved by the Government.

The Emergency Management Centre is established to function as a permanent organisation of the Emergency Commission and has the function of a Government institution. In the event of large-scale natural disasters, technological accidents and catastrophes, the Centre is responsible for organising

¹⁵³¹ Civil Protection Law, Chapter IV, art. 20-22.

¹⁵³² Country profile: Lithuania, Vademecum - Civil Protection. DG ECHO.

disaster containment, rescue of people and mitigation of the effects. If there is a need to assist the civil protection forces engaged in rescue operations, the Centre is able to mobilise services and equipment under the control of other state institutions.

In the event of emergencies the Emergency Management Centre has to adopt and submit to the ministries, other public administration institutions, local authorities and the population mandatory decisions on localisation and mitigation of the effects of an emergency.¹⁵³³

The tasks of the Emergency Management Centre include:

- performing monitoring of risk factors and threats;
- forecasting possible crises;
- coordinating activities of state institutions and entities within the crisis prevention area;
- ensuring the operation of crisis management infrastructure and constant exchange of information on crisis management between institutions;
- developing international cooperation within the field of crisis management.¹⁵³⁴

Further, the Centre, while implementing the tasks assigned to it, collects and analyses information received from the national authorities, mass communication and news agencies regarding threats and ensures the protection of information representing a state or official secret. The Centre carries out a comprehensive analysis of information received in the area of crisis management, forecasting possible crisis situations and the scope of such situations; prepares for the President, the Parliament, the Government and the Council of National Defence overviews of the most important developments, special communications and draft recommendations regarding crisis prevention.

Moreover the Centre acts as a contact point for the national authorities and international organisations that is available 24 hours a day.¹⁵³⁵

¹⁵³³ Civil Protection Law, Chapter IV, art. 20-22.

¹⁵³⁴ White Paper 2002, Lithuanian Defence Policy, pp.9-10.

¹⁵³⁵ Resolution No. 939, Regulations of the Crisis Management Centre under the Ministry of National Defence, Chapter II, art. 5.

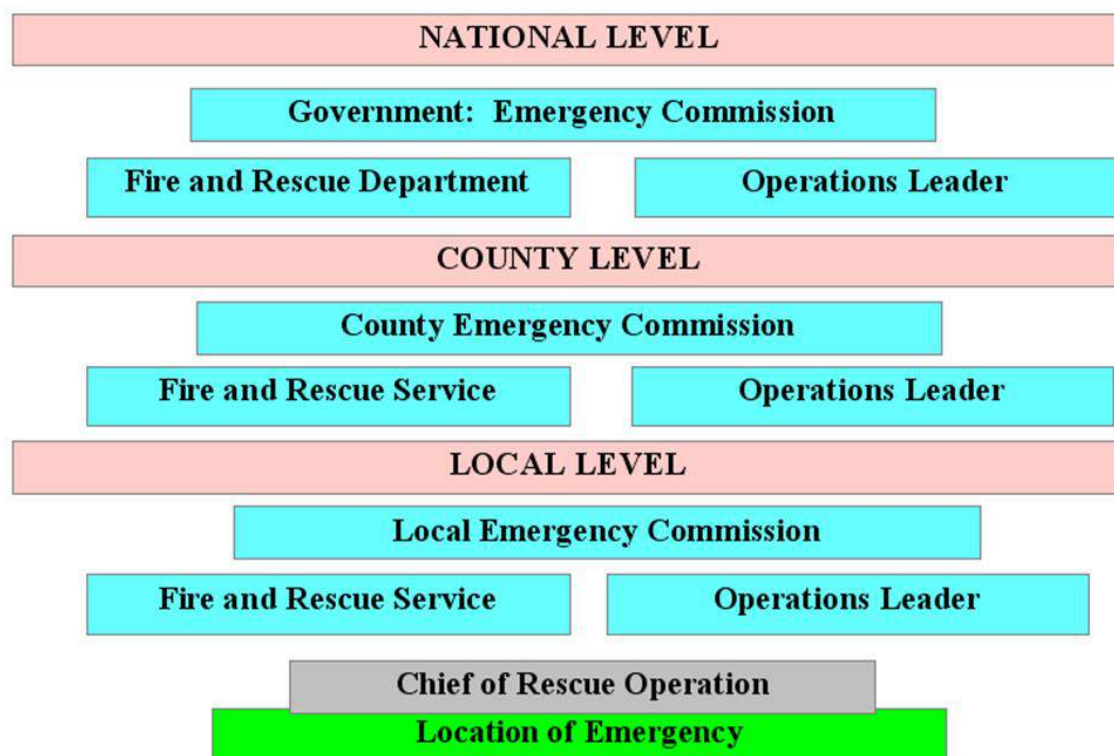


Figure 30: Lines of coordination of the Lithuanian crisis management system. (Source EC ECHO)

In addition, the Emergency Management Centre, obtains from national authorities detailed information necessary for prevention and management of crises and access to databases and registers in order to obtain the necessary information on possible threats.¹⁵³⁶

The Lithuanian civil security operators such as fire brigades and rescue teams are accountable to mayors and county commissioners, which hold the central responsibility for operational crisis management and head the crisis information exchange between state and local levels.¹⁵³⁷

The Fire and Rescue Department is an essential institution of the Lithuanian civil security system in directing the activities of the civil protection system and coordinating the overall national organization of emergency prevention. The Fire and Rescue Department also play key role in organising civil protection training, coordinating the evacuation of citizens and to mobilization inter-agency resources.¹⁵³⁸

Moreover, the Fire and Rescue Department coordinates the organisation of national civil protection exercises, informs neighbouring states of imminent emergencies, establishes national emergency operations centre and manages the civil protection supplies of the state reserve. In addition to these tasks, the Department drafts the national emergency management plan and leads the activities of the civil protection and rescue system. It is responsible for organising disaster prevention, coordinating the civil protection activities of public institutions and economic entities and ensuring preparedness to implement the planned civil protection measures in emergency situations during peacetime and war.¹⁵³⁹

¹⁵³⁶ Resolution No. 939, Regulations of the Crisis Management Centre under the Ministry of National Defence, Chapter II, art. 5.

¹⁵³⁷ ANVIL Project Country Study: Lithuania, p.14.

¹⁵³⁸ Ibid., pp.14-15.

¹⁵³⁹ ANVIL Project Country Study: Lithuania, p.15.

The State Fire and Rescue Service of the Republic of Lithuania consists of the following entities: the Fire and Rescue Department under the Ministry of the Interior and its 17 subordinate services. These services are divided into 10 county Fire and Rescue Boards, 3 Fire and Rescue Services for the protection of critical infrastructure, the Specialised Fire and Rescue Service, the Fire-fighters Training School, the Fire Research Centre and the Emergency Response Centre.

The Fire and Rescue Department under the Ministry of the Interior is responsible for the protection of people, property and environment in case of emergencies. In addition, it is in charge of fire and emergency prevention. The Fire and Rescue Department is an independent body of the Ministry of the Interior. The main tasks of the institution include:

- Determining national policy regarding fire and civil protection of the country;
- Developing strategies for its subordinate services;
- Drafting fire and civil protection legislation for implementation;
- Performing state fire supervision;
- The Department is in charge of prevention and management of emergencies;
- Providing counseling to the public institutions and businesses in the field of civil protection;
- Coordinating fire and civil protection training;
- Recording fire and rescue statistics;
- Encouraging NGO's and volunteer organizations in the field of fire prevention.¹⁵⁴⁰

Furthermore, Counties Fire and Rescue Boards (CFRBs) are established to operate counties' located centres. The CFRB's and their subordinate fire and rescue services in districts and cities are responsible for a variety of rescue operations such as extinguish fires, rescue operations, response to industrial and traffic accidents, chemical and other emergencies as well as rescue people from water incidents. In addition the Boards provide aid to other special services when required.¹⁵⁴¹

*Moreover, there is a separate Search and Rescue Service, subordinated to the Ministry of Transport and Communications. It is comprised of the Maritime Search and Rescue Co-ordination Centre and the Aeronautic Search and Rescue Co-ordination Centre and other specialized divisions. The aim of the service is to provide a search and rescue capability for aircraft and ships in danger or experiencing other unforeseen calamities in, around or above the territory of Lithuania, in accordance with international agreements.*¹⁵⁴²

The Lithuanian Red Cross Society (LRCS), founded in 1919, is the biggest NGO in the crisis management domain in Lithuania.¹⁵⁴³ It is a part of the International Red Cross and Red Crescent Federation, with its headquarters in Geneva. LRCS is entitled to prevent suffering of human beings and provide assistance to people in need. Lithuanian Red Cross Society unites more than 2825 members, and 821 of them are the members of the Youth LRCS and number around 1200 volunteers.¹⁵⁴⁴

¹⁵⁴⁰ <http://www.vpgt.lt/index.php?400236387> (30 October 2014).

¹⁵⁴¹ <http://www.vpgt.lt/index.php?400236387> (30 October 2014).

¹⁵⁴² Christer Pursiainen, Sigrid Hedin and Timo Hellenberg, *Civil Protection Systems in the Baltic Sea Region, Towards Integration in Civil Protection Training*, p. 15-16.

¹⁵⁴³ ANVIL Project Country Study: Lithuania, p.27.

¹⁵⁴⁴ <http://www.redcross.lt/en/about-us/history> (30 October 2014).

3.2 Organisational cooperation

International cooperation in Lithuania in the field of crisis management is coordinated by the Fire and Rescue Department in cooperation with the disaster response monitoring and coordination centres of the United Nations. The Department represents Lithuania in the Civil Protection Work Group of the EU Council, EU DG ECHO meetings, EC SEVESO II and is a member of the European Union Fire Safety Network. Lithuania is also an active member in NATO Civil Emergency Planning Committee's work.

Individual ministries and other state civil security institutions participate in international civil protection activities. International assistance in civil protection and civil security is provided by an international emergency response team, experts and/or by providing assistance supplies. An international emergency response team is formed by the minister of the Interior and the procedures for requesting, accepting and providing international civil protection assistance are established by the government.

Furthermore, an agreement has been signed with Poland and Norway in 1995, regarding early notification in case of nuclear accident and cooperation in the field of nuclear safety and radiological protection, as well as an agreement on information exchange and cooperation in the nuclear safety and radiological protection domain with Denmark (1993).

Lithuania has been active participating and providing international assistance in various international crisis situations, which include the 1998 floods in Poland, 2005 floods in Georgia, the major earthquake in Pakistan in 2005, forest fires in Macedonia in 2007, oil spill in the Daugava River in Latvia (2007), the 2008 floods in Ukraine, Moldova and Romania, the armed conflict in Georgia (2008), forest fires in Russia (2010), floods in Pakistan (2010), floods in Poland (2010) and floods in Moldova in 2010. Lithuania has not officially requested disaster assistance through any international or regional arrangements.¹⁵⁴⁵

The Fire and Rescue Department has been actively participating in various European Union activities, adopting the legal acts of the EU in the field of civil protection. The Fire and Rescue Department represents Lithuania's interests in the Civil Protection Working Group of the Council of the European Union and in the Civil Protection Committee and the Committee for the Implementation of the Directive on the Control of Major Accidental Hazards Involving Dangerous Substances (SEVESO II). Since 2004, the Fire and Rescue Department is a member of the European Union Fire Safety Network.

The Fire and Rescue Department also takes part in the activities of the NATO Civil Emergency Planning Committee, as well as coordinates the activities of other state institutions in planning boards and committees. It is also responsible for the implementation of the UN Convention on the Transboundary Effects of Industrial Accidents.

The Civil Protection Board Situation Coordination Unit of the Fire and Rescue Department liaises with the NATO's Euro-Atlantic Disaster Response Coordination Centre and informs it about Lithuania's capabilities to provide assistance.¹⁵⁴⁶

Moreover, Lithuania participates in the BaltFloodCombat initiative. It is a cross-border cooperation project between Estonia, Latvia and Lithuania where the three Baltic States are represented respectively by the Estonian Rescue Board, Latvian Fire and Rescue Service and Lithuanian Fire and Rescue

¹⁵⁴⁵ Ibid., pp.21-22.

¹⁵⁴⁶ <http://www.vpgt.lt/go.php/lit/NATO-civilinio-pasirengimo-ekstremaliosioms-situacijoms-planavimas/742> (28 October 2014).

Department under the Ministry of the Interior. The project is within the framework of Preparatory Action of the Civil Protection Mechanism and is funded by the European Commission. The European Commission finances 80 % of the project while the remaining funding comes from the national budgets. The aim of the project is to create reliable and efficient national flood response capacity, and also to establish and register in CECIS a multinational High Capacity Pumping module, consisting of commonly trained personnel and up-to-date equipment. Main objectives of the project include enhancing national flood response capability; strengthening European rapid response capacity, and also to discover, through innovative approach, possibilities and ways of multilateral civil protection capacity building.¹⁵⁴⁷

¹⁵⁴⁷

BaltFloodCombat,

at

www.baltfloodcombat.eu/index.php?option=com_content&view=article&id=22:whats-new-in-15&catid=29:the-cms (13 September 2014).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The Civil Protection Law defines the procedures to be taken in cases of emergency. The Law sets out that fire fighting search and rescue activities in case of disaster are organised by the commander of rescue operations in charge of the civil protection actions at an initial emergency stage. In urgent situations for mitigating the effects of emergencies, fire protection and rescue unit officers have to perform the functions of the commander of rescue operations without a special order.¹⁵⁴⁸

All civil protection and rescue system forces, irrespective of their subordination, when arrive at the disaster scene become subordinate to the commander of rescue operations. No official has the right to interfere in the activities of the commander of rescue operations or cancel his orders and instructions to the forces of the civil protection and rescue system.

The police coordinate their actions with the commander of rescue operations or the officer performing his functions. The first aid service manages first aid on the scene of the disaster, notifying the nearest individual health care institutions about the victims and ensuring their transport. All individual health care institutions must be prepared to organise the work of the institutions in an emergency in accordance with a plan prepared in advance and co-ordinated with the municipality. Such plan is developed according to the recommendations of the Ministry of Health.¹⁵⁴⁹

The Lithuanian Armed Forces may be employed in disaster operations by the responsible for the crisis operation officers in accordance with the plans drawn up in advance on the interaction with chiefs of military districts.¹⁵⁵⁰

The National Emergency Management Plan defines the procedures for warning and informing the public, for rescue operations and coordination and for organising crisis communication, as well as the procedures for evacuation.¹⁵⁵¹

The procedure for the evacuation of the population shall be established by the Government. Taking into account the magnitude of an emergency and the threat for the population, county governors, mayors of districts/cities and managers of economic entities have to take decisions for the evacuation of the population; in individual cases, decisions evacuation of the population from the disaster area has to be made by the State Fire Prevention and Rescue Service, fire prevention services of district (city) municipalities and police officers. The population shall be evacuated in accordance with the territorial principle.¹⁵⁵²

Evacuation of the population shall be organised by evacuation commissions, formed at the district (city) emergency management centres and has to be directed by people appointed by mayor of a district (city) municipality. The expenses of the evacuation of the population and their accommodation will be compensated from the state budget in the manner prescribed by the Government.¹⁵⁵³

¹⁵⁴⁸ Civil Protection Law, Chapter V, art. 30-32.

¹⁵⁴⁹ Civil Protection Law, Chapter V, art. 30-32.

¹⁵⁵⁰ Civil Protection Law, Chapter V, art. 30-32.

¹⁵⁵¹ National Emergency Management Plan of Lithuania, Chapter I, Chapter II, Chapter III.

¹⁵⁵² Civil Protection Law, Chapter V, art. 30-32.

¹⁵⁵³ Civil Protection Law, Chapter V, art. 30-32.

Furthermore, procedures for prevention of nuclear accidents, their containment and mitigation of their effects are defined in the Law on Nuclear Energy.

4.2 Operations planning

The main operational bodies of the civil security system in Lithuania are the Emergency Commissions, which are technically assisted by the State Fire and Rescue Service. The emergency commissions can be formed on two levels: municipal, chaired by the director of the municipal administration and government, chaired by the minister of Interior.¹⁵⁵⁴

The role of the Fire and Rescue Department is to implement the civil protection measures developed by the government and to coordinate the activities of governmental institutions and economic entities. In addition, the Department prepares civil protection plans for the management of emergencies, major accidents or natural disasters in both peacetime and wartime, as well as organises the training and education of emergency officers.¹⁵⁵⁵

In addition, the Plan is a document that defines the material and human resources of the civil protection entities in event of municipal or state level emergencies, as well as the procedures for mobilisation of human resources and for the organization of liquidation, elimination for the consequences thereof.

Disaster contingency plans of state level include:

- Plan of the Republic of Lithuania on population protection in case of a radiological accident at Ignalina Nuclear Power Plant,
- State search and rescue plan in case of an aircraft or watercraft accident in the territory of the Republic of Lithuania,
- National sea accidents pollution liquidation plan,
- State rescue and flood consequences liquidation in Klaipeda county plan.¹⁵⁵⁶

4.3 Logistics support in crises

An agreement signed between the United States Secretary Of Defense and the Republic of Lithuania Minister of National Defense concerning Mutual Logistic Support. The provisions of this agreement foresee that the parties will respond to the requests of the other party for logistic support, supplies, and services not only in peacetime, but also in periods of crisis, contingency operations or, war.¹⁵⁵⁷

Additional information is not found in policy or other official documents related to logistics support in crises.

¹⁵⁵⁴ ANVIL Project Country Study: Lithuania, p.17.

¹⁵⁵⁵ EC ECHO, Vademecum, http://ec.europa.eu/echo/files/civil_protection/vademecum/lt/2-lt-2.html#cipro (30 October 2014).

¹⁵⁵⁶ <http://www.unisdr.org/2005/mdgs-drr/national-reports/Lithuania-report.pdf>.

¹⁵⁵⁷ Implementing Arrangement (Ec-Lh-01) Between the United States Secretary of Defense and the Republic of Lithuania Minister of National Defense Concerning Mutual Logistic Support.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The Minister of the Interior approves the national civil protection exercises and is in charge of information exchange on an incident or emergency event¹⁵⁵⁸ (Figure 4).

The National Emergency Management Plan states the procedures for warning and informing the public, for rescue operations and coordination, organisation of communication, the provisions of material resources and their use, as well as the procedures for evacuation.¹⁵⁵⁹

The Fire and Rescue Department is an essential institution of the Lithuanian civil security system in directing the activities of the civil protection system and for coordinating the overall national organization of emergency prevention. The Fire and Rescue Department also has the main responsibility of early warning and public information in case of an emergency.

The director of the Department is responsible for maintaining the comprehensive early warning system and civil protection signals of citizens, state and municipal institutions and economic entities in case of an emergency.

Furthermore, the Director approves civil protection recommendations, regulations of municipal Emergency Commissions, regulations of the national emergency operations centre and the recommendations for emergency management plans.¹⁵⁶⁰

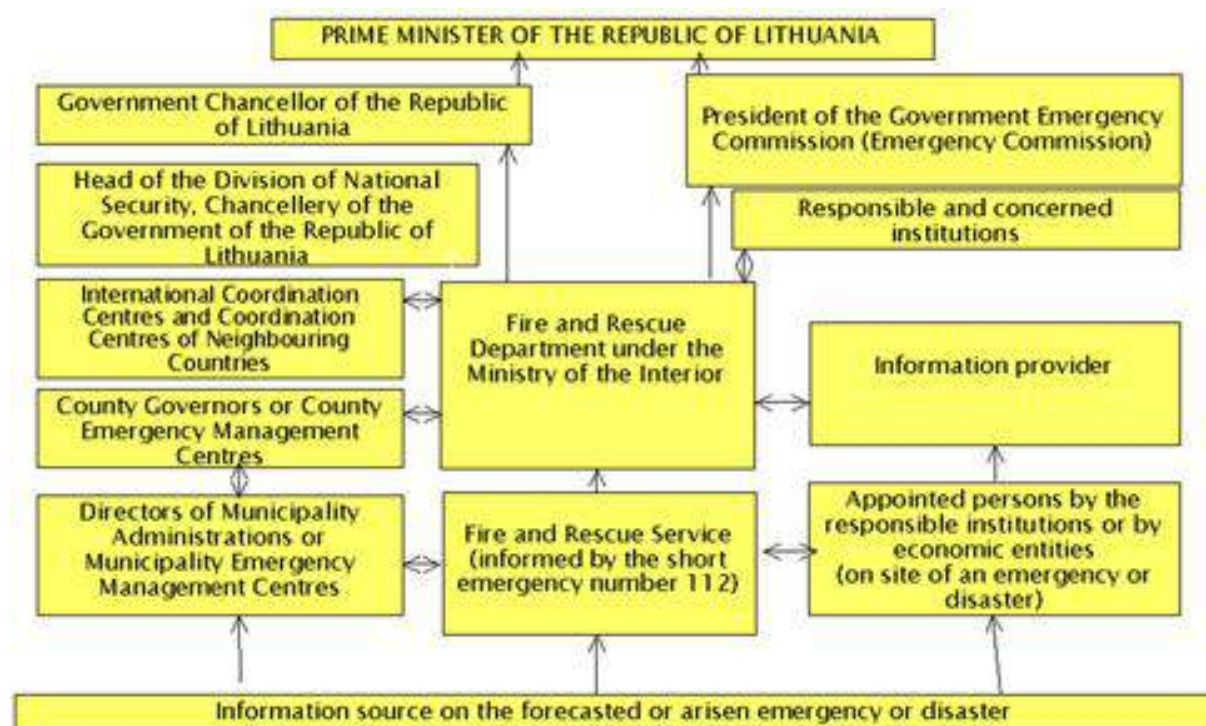


Figure 31: Lines of communication of the Lithuanian crisis management structure. (Source EC ECHO)

Lithuania has early warning systems for flooding, for an accident in case of an emergency at the Ignalina Nuclear Power Plant, for radiological pollution and others. In Lithuania there is a complex early

¹⁵⁵⁸ National Emergency Management Plan of Lithuania, Chapter I, Chapter II, Chapter III.

¹⁵⁵⁹ National Emergency Management Plan of Lithuania, Chapter I, Chapter II, Chapter III.

¹⁵⁶⁰ ANVIL Project Country Study: Lithuania, p.15.

warning system for radiological risks which uses a surveillance tool for gamma monitoring of the environment and the central monitoring server. The system is constantly operational and is fully automatic. In case the radiation reaches threshold levels, the system will automatically report to the main server at the Joint Research Centre. In addition, there are 392 measuring points manually operated at the Fire brigades.

5 Capabilities

5.1 Human resources

The State Fire and Rescue Service, as the main operational authority in crisis management, consists of the Fire and Rescue Department under the Ministry of the Interior and 17 subordinate units: 10 county Fire and Rescue Boards, 3 Fire and Rescue Services for the protection of critical infrastructure, the Specialised Fire and Rescue Service, the Fire-fighters Training School, the Fire Research Centre and the Emergency Response Centre. Altogether, the State Fire and Rescue Service employs almost 5,000 people.¹⁵⁶¹

Educational activities are mainly organised by the State Fire and Rescue Service. The Fire-fighters Training School is the main stakeholder in Lithuanian civil security education. It comprises administrative and theoretical training divisions, divers training division, civil protection training centre and practical training division. The Fire Research Centre represents the main entity in terms of CBRN education in Lithuania.

Besides the educational activities, the centre performs fire tests, technical fire exercises, fire investigations, attestations of fire equipment and construction products and takes part in the standardization processes, as well as develops various methodological documents.

However, civil security training is mainly conducted by the public institutions in Lithuania. They also establish the procedures for organizing civil protection exercises, which are implemented by the relevant responsible authorities, such as the Ministry of Interior and the Ministry of Defence.

5.2 Materiel (non-financial) resources

The State Fire and Rescue Service operates 455 vehicles - 236 fire-fighting tankers, 168 with special purpose, 202 are light operational, and 115 other types of vehicles. The State Fire and Rescue Service maintains and uses 123 building complexes.¹⁵⁶²

Lithuania plans to develop air and maritime search and rescue capabilities, using potential financing for the acquisition of helicopters and other necessary equipment from EU funds and programmes.¹⁵⁶³

The participation of the Lithuanian Armed Forces in emergency situations could be requested in case of national threat. Two helicopters and a ship are on a constant duty for search and rescue missions in the territory of Lithuania.¹⁵⁶⁴

The Fire and Rescue Department manages the public warning and information system P-160, which cover the whole country, for warning and informing the public about the risks of emergencies. It also collects and stores data in a central registry database of dangerous objects, which collects information about possible threats to the state. The Department coordinates the level of response of the

¹⁵⁶¹ <http://www.vpgt.lt/index.php?393254094>, last accessed 30.10.2014

¹⁵⁶² <http://www.vpgt.lt/index.php?393254094>, last accessed 30.10.2014

¹⁵⁶³ Guidelines of the Minister of National Defence for 2014–2019, Chapter II, art. 13.5

¹⁵⁶⁴ Guidelines of the Minister of National Defence for 2014–2019, Chapter II, art. 12

county fire and rescue board with the average response time of 6-10 minutes in cities, and 14-20 minutes in rural areas.¹⁵⁶⁵

In emergency or urgent cases, the rescue manager or operations manager determines how much and what material resources are needed for emergency response, search and rescue works and for elimination of the consequences caused by the crisis situation and requests to the Director of Municipal Administration to provide them.¹⁵⁶⁶ Government resolution 1107, dated 21 July 2010, provides the definition for the use and compensation of material resources in case of emergency, search and rescue work.

The Fire and Rescue Department manages the state stockpile of the civil protection resources and in this way makes it possible for the state and municipal institutions, businesses and population to become prepared for emergencies, to maintain the sustainability of the national economy, and to protect property and environment against disasters.¹⁵⁶⁷

In case of threat the Civil Protection Department sends signals, information and recommendations to population via the “Signal” automatic warning system, which is equipped with centrally operated sirens, radio and loudspeakers, national TV and radio. The State Public Warning and Information System operates 706 centrally sirens, which cover around 2 million people. Most of these sirens are located in Ignalina and Zarasai regions. In addition the warning system has 564 local operational warning sirens.

The local operated sirens are located mostly in rural areas. In the territories not covered by the sirens special equipped vehicles are intended to be used. The police, firemen or other civil protection forces are foreseen to perform such warning and their routes are included in the plans in advance.

5.3 Training

In Lithuania, the Minister of the Interior approves the national civil protection exercises.

Training in the basics of civil protection is organised by general secondary schools and college education institutions through programmes developed by the Civil Protection Department and approved by the Ministry of Education and Science. Students are trained in higher educational institutions according to civil protection training programmes approved by the heads of higher educational institutions. The training in civil protection basics of economic entities and institutions is given in accordance with civil protection training programmes approved by the Civil Protection Department. The training of officials of emergency management centres of economic entities, the State Fire Prevention and Rescue Service and other civil protection personnel is carried in accordance with civil protection training programmes developed by the Civil Protection Department.

The Civil Protection Training Centre is the principal educational authority for civil protection and rescue activities. The Training Centre is established and its regulations are approved by the Minister of National Defence.

For testing the preparedness of the public administration institutions, local government and economic entities in emergencies and for the improvement of their civil protection management skills,

¹⁵⁶⁵ <http://www.vpgt.lt/index.php?393254094> (30 October 2014).

¹⁵⁶⁶ <http://www.vpgt.lt/go.php/lit/Materialiniu-istekliu-teikimas/724> (30 October 2014).

¹⁵⁶⁷ <http://www.vpgt.lt/index.php?400236387> (29 October 2014).

exercises and training are financed from the state budget and conducted according to the regulations set out by the Government.¹⁵⁶⁸

Universities and other public institutions provide courses and vocational training in the field of civil security and their curriculum and include courses such as natural disaster reduction and roots and causes of violent extremism.

Moreover, educational programmes related to disaster response and risk reduction are taught in the public school system for 11-18 year juveniles, in vocational schools and colleges. In addition, civil protection teachers attend trainings and seminars on civil protection. There are various training programmes available depending on the type of audience. The Government of approves the programmes as well as their duration.

5.4 Procurement

5.4.1 Procurement regulation

The purchases of the Fire Rescue Department are made in accordance with the Law on Public Procurement.¹⁵⁶⁹ The Law and implementation norms follow respective directives of the European Union, such as Directive 2014/24/EU, Directive 2014/25/EU, Directive 2009/81/EC, and Directive 2004/18/EC.

Further, Lithuania aims at developing air and maritime search and rescue capabilities using the possibility to finance the acquisition of helicopters and other equipment necessary for this function from EU funds.¹⁵⁷⁰

In Figure 5 an example of the Fire and Rescue Department contact announcement is shown. Further information on specific procurement procedures within the crisis management domain could not be obtained within the given timeframe.

Select the type of procurement procedure

Purchase an object type: The purchase will be carried out by

Select the type of purchase objekto

Type of Service: The purchase will be carried out

Select the type of purchases

The purchase will be subject to enviro

Object of the contract	The contracting authority	Quantity	Date
Travel services Services (3)	Fire and Rescue Department under the Ministry of Internal Affairs (188601311)	£ 370,980.00	2013-01-01 Quarter: I
Warning and informing the population using public mobile telephone service providers, network infrastructure systems maintenance services (7)	Fire and Rescue Department under the Ministry of Internal Affairs (188601311)	1.00 System	2013-01-01 Quarter: I
Public warning and information using a public mobile telephone service providers, network infrastructure, the development of the 3G (UMTS) networks Product	Fire and Rescue Department under the Ministry of Internal Affairs (188601311)	1.00 System	2013-01-01 Quarter: I
Cleaning Services Services (14)	Fire and Rescue Department under the Ministry of Internal Affairs (188601311)	£ 131,936.00	2013-07-01 Quarter: III
Building in Vilnius, Švitrigailos. 18, II, housing repairs, installation hideout State Emergency Commission for operation of the Works	Fire and Rescue Department under the Ministry of Internal Affairs (188601311)	£ 5,041,322.00	2013-07-01 Quarter: III

Figure 32: Example of the Lithuanian online public procurement portal.¹⁵⁷¹

¹⁵⁶⁸ Civil Protection Law, Chapter VI, article 33-35.

¹⁵⁶⁹ <http://www.vpgt.lt/index.php?-297797137> [27 October 2014].

¹⁵⁷⁰ Guidelines of the Minister of National Defence for 2014–2019, Chapter II, art. 13.5.

Cross-border purchases carried out in the field of defence and security are complied with European Council Directive 2009/81/EC on defence and sensitive security procurement, as well as Directives 2004/17/EC and 2004/18/EC.¹⁵⁷²

5.4.2 Procurement procedures

Information on specific procurement procedures within the crisis management domain could not be obtained within the given timeframe.

5.5 Niche capabilities

Potential niche capability that could be filled by Lithuania and be potentially interesting for the EU crisis management structures could be providing expertise in the energy security domain. In the future energy security will increase in importance for crisis management.

An example of development of such research capability is the NATO Energy Security Centre of Excellence (ENSEC COE) was established in 2012 and currently operates as a widely recognised international military organization with the aim of providing qualified and appropriate expert advice on questions related to operational energy security.

The ENSEC COE assists the Strategic Commands and other NATO bodies, nations, partners, and other civil and military bodies by providing expertise on all aspects of energy security in support of NATO's capability development process, mission effectiveness, and interoperability.¹⁵⁷³

Similar centres or agencies could be established by the EU in order to provide expertise in various fields related to crisis management. Potential niche capability that could be filled by Lithuania and represent interest to EU crisis management structures is the development of expertise in the energy security domain or other relevant area.

¹⁵⁷¹ <http://www.eviesiejipirkimai.lt>

¹⁵⁷² <http://www.vpt.lt/rtmp8/dtd/index.php?pid=121189211152&lan=LT>, last accessed 27.10.2014

¹⁵⁷³ <http://www.enseccoe.org/en/about-us/centre-of-excellence.html> (accessed 27 October 2014).

Resources

Legislative acts

Civil Protection Law, adopted 15 December 1998.

Law on Basics of National Defence, adopted 5 December 2002.

Law of Fire Safety, adopted 19 December 1996.

The Law on International Operations, Military Exercises.

Other normative acts

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances. *Official Journal* L 010, 14 January 1997, pp. 13–33.

Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, OJ L 134, 30.4.2004, p. 114–240. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32004L0018>.

Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC, OJ L 216, 20.8.2009, p. 76–136. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1452809295426&uri=CELEX:32009L0081>.

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, OJ L 94, 28.3.2014, p. 65–242. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1452809401839&uri=CELEX:32014L0024>.

Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance, OJ L 94, 28.3.2014, p. 243–374. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1452809356679&uri=CELEX:32014L0025>.

Guidelines of the Minister of National Defence for 2014–2019, adopted 20 January 2014.

Implementing Arrangement (Ec-Lh-01) Between the United States Secretary of Defense and the Republic of Lithuania Minister of National Defense Concerning Mutual Logistic Support, 29 March 1996.

National Emergency Management Plan of Lithuania, adopted 20 October 2010.

Resolution No. 1028 on the approval emergency prevention procedures. *Official Gazette*, 2010, no. 87-4585, 14 July 2014.

Resolution No. 103-4322.

Resolution No. 1107 on the use and compensation of material resources in case of emergency, search and rescue work, 21 July 2010.

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EM-DAT – The International Disaster Database, <http://www.emdat.be/database>

Fire and Rescue Department under the Ministry of Interior, <http://www.vpgt.lt>

Government of Republic of Lithuania, <http://www.lrv.lt/en>

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Expert interviews

Expert from the academic field (3 November 2014)



Driving Innovation in Crisis Management for **E**uropean **R**esilience

LUXEMBOURG

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Linette de Swart and Rachel Beerman)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The number of crises and disasters on the territory of Luxembourg is rather limited. Therefore, the main feature of the *crisis management* policy is that it is *case-by-case* based. National Protection in Luxembourg originates from protection of the public interests against the military threats and was mainly set up after the Second World War. When the Cold War ended, the national protection mechanism was frozen. After 11 September 2001, it was reactivated again. Currently, the mechanism is placed under the authority of the Prime Minister. Since then, several project laws regarding the restructuring of the crisis management system have been drawn up. In 2012, for example, the Draft Law (n. 6475) concerning national protection was created. It is currently under assessment of parliament. It is envisaged that in the near future the Draft Law will be passed, thus a new crisis management set-up will be created.

Therefore, the main feature of Luxembourg crisis management policy is that it is approached case-by-case. Similarly, the financing of crises takes place on a case-by-case basis. Some organisations are mobilised only once a crisis is identified, so financing them is decided after the onset of a crisis as well.

Despite this ad-hoc approach, the government of Luxembourg has adopted several plans on how to respond to Ebola, pandemic influenza, and cyber attacks. The close location of a nuclear plant in France also required a (nuclear) emergency response plan which was elaborated in October 2014. It is also applicable to nuclear accidents in other nuclear plants. The financing of the organisations involved in the crisis management is also on the case-by-case basis. Some of the organisations are formulated when a crisis is identified therefore financing of them is decided after that as well.

Currently, national protection and crisis management functions are distributed across multiple governmental organisations, largely depending on the nature of the disaster and risk involved. The Ministry of Labour Employment and Immigration, the Inspectorate of Labour and Mines, the Ministry of Interior (Ministère de l'Intérieur), the Rescue Service Agency (Administration des services de secours), the Ministry of Health, Grand Ducal Police, the Army are involved in a natural or man-made crisis management (the list is not exhaustive and can vary depending on the crisis).

The main authority lies with the Prime Minister. He is assisted by the High Commission for National Protection (Haut-Commissariat à la Protection Nationale) which is a civil authority. The Prime Minister is also assisted by the Supreme Council for National Protection (Conseil supérieur de la Protection nationale) which is a consultative body for the overall national protection in Luxembourg. The Council consists of one delegate from each Ministry and directors (or heads) of other administrations and services involved in crisis management. Depending on the nature of a crisis, the Crisis Cell (Cellule de Crise) is composed of the Supreme Council members. In addition, there are National Committees, which are created to address a specific field of national protection assisting the government in those areas. The military in general is not involved actively. However, representatives of the military are present in the national committees and Supreme Council.

As soon as a crisis or a disaster is identified, the Crisis Cell (Cellule de Crise, CC) is activated by the Prime Minister and is chaired by the High Commissioner for National Protection. The CC initiates, coordinates and monitors the execution of all measures destined to counter the consequences of a crisis and to favour recovery.

The operational lead is taken by the Rescue Service Agency (Administration des services de secours) which is subordinated to the Ministry of Interior. In case of major accidents or disasters, this agency leads rescue operations. It is also the organisation that trains the volunteers and divisions of the ASS are equipped with the corps of volunteers.

Table of Contents

LUXEMBOURG Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1068
Overview	1069
Table of Contents	1071
List of Figures	1073
List of Tables.....	1073
List of Abbreviations.....	1074
1 Policy	1075
1.1 Risk Assessment.....	1075
1.2 Policy and Governance	1078
1.2.1 Strategy scope and focus.....	1078
1.2.2 Monitoring and analytical support to policy making; R&D	1079
1.2.3 Policy for Prevention	1080
1.2.4 Policy for Preparedness.....	1081
1.2.5 Policy for Response	1081
1.2.6 Policy for Relief and Recovery	1083
1.3 Financing.....	1083
1.3.1 Investing in preparedness	1083
1.3.2 Investing in consequence management.....	1084
1.4 Policy review, Evaluation & Organisational Learning	1085
1.4.1 Post-Disaster Assessment.....	1085
1.4.2 Departmental Lessons Learned systems	1085
1.4.3 Centralised (national) Lessons Learned system	1085
1.4.4 International exchange for Lessons Learned.....	1085
1.4.5 Regular policy reviews.....	1086
1.5 Resilience	1086
1.6 Information sharing and data protection	1086
2 Legislation	1089
2.1 Crisis (emergency, disaster) management concept.....	1090
2.2 General crisis (emergency, disaster) management law.....	1092
2.3 Emergency rule	1096
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1097

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1098
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1099
2.7	Legal regulations for international engagements of first responders and crisis managers	1100
3	Organisation	1102
3.1	Organisational chart	1102
3.2	Organisational cooperation	1106
4	Procedures	1108
4.1	Standing Operating Procedures (SOPs) and Guidelines	1108
4.2	Operations planning	1108
4.3	Logistics support in crises	1110
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1110
5	Capabilities	1112
5.1	Human resources	1112
5.2	Materiel (non-financial) resources	1112
5.3	Training	1113
5.4	Procurement	1114
5.4.1	Procurement regulation	1114
	Scope of the Public Sector Directive	1115
	Award procedures	1115
5.4.1.1	Scope	1117
5.4.2	Procurement procedures	1118
5.4.2.1	Selection criteria	1118
5.5	Niche capabilities	1119
	Resources	1121
	Legislative acts	1121
	Other normative acts	1122
	Official documents (white papers, strategies, etc.)	1123
	Online resources (e.g. websites of key CM organizations)	1123
	Publications	1123
	Expert interviews	1124

List of Figures

<i>Figure 1</i>	<i>Schematic location of three closest nuclear plants to Luxembourg.</i>	<i>1077</i>
<i>Figure 2</i>	<i>Location of the relief centres in Luxembourg.</i>	<i>1082</i>
<i>Figure 3</i>	<i>Legal hierarchy in Luxembourg</i>	<i>1090</i>
<i>Figure 4</i>	<i>Structure of the crisis management in Luxembourg.</i>	<i>1093</i>
<i>Figure 5</i>	<i>Organisational structure of the Rescue Service Agency.</i>	<i>1095</i>
<i>Figure 6</i>	<i>Organisational structure of the Rescue Service Agency with the distinction of authority levels.</i>	<i>1099</i>
<i>Figure 7</i>	<i>Composition of the National Committees of Luxembourg.</i>	<i>1103</i>
<i>Figure 8</i>	<i>Diagram of national protection structure of Luxembourg.</i>	<i>1104</i>
<i>Figure 9</i>	<i>Composition of the Crisis Cell of Luxembourg.</i>	<i>1105</i>
<i>Figure 10</i>	<i>Organisational structure of the Department of Radiological Protection.</i>	<i>1106</i>
<i>Figure 11</i>	<i>Ebola Emergency Simulation Exercise</i>	<i>1120</i>

List of Tables

<i>Table 1</i>	<i>Top 10 Natural Disasters in Luxembourg by economic damages between 1990 and 2014.</i>	<i>1075</i>
<i>Table 2</i>	<i>Top 10 Technological Disasters in Luxembourg between 1990 and 2014.</i>	<i>1076</i>
<i>Table 3</i>	<i>Budgeted activities for the Rescue Service Agency, High Commission for National Protection and Computer Emergency Response Team based on the adopted budgets of 2012 – 2014 (in euros).</i>	<i>1084</i>

List of Abbreviations

ASS	Rescue Services Agency (Administration des services de secours)
Benelux	Belgium, the Netherlands and Luxembourg
CC	Crisis Cell (Cellule de Crise)
CERT	Computer Emergency Response Team
CHL	Centre of Hospitalisation of Luxembourg (Centre Hospitalier de Luxembourg)
CIRCL	Computer Incident Response Center Luxembourg
CMPN	Ministerial Committee for National Protection (Comité Ministériel de Protection Nationale)
CONAT	National Committees (Comités Nationaux)
CRED	Centre for Research of Epidemiology of Disasters
CSPN	Supreme Council for National Protection (Conseil Supérieur de la Protection)
EC	European Commission
EEA	European Economic Area
EERC	European Emergency Response Team
ENPC	National School of Civil Protection (l'Ecole Nationale de la Protection Civile)
ENSIS	National School of Fire and Rescue Services (l'Ecole Nationale du Service d'Incendie et de Sauvetage)
ERP	Emergency Response Plan
FNSP	National Federation of Firefighters (la Fédération Nationale des Corps de Sapeurs - Pompiers)
HCPN	High Commission for National Protection (Haut-commissariat à la Protection nationale)
INES	International Nuclear Events Scale
ISO	International Organisation for Standardisation
LAR	Luxembourg Air Rescue
MEDEVAC	Medical Evacuation: Transport ambulances and repatriation by air
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organisation
SECRICOM	Seamless Communication for Crisis Management for EU safety
SIP	Information and Press Agency (Service Information et Presse du gouvernement luxembourgeois)
SOP	Standing Operating Procedures
WHO	World Health Organization

1 Policy

1.1 Risk Assessment

Luxembourg is one of the smallest countries in Europe: it is about 2,586 square kilometres in size, while being 82 kilometres long and 57 kilometres wide. Luxembourg has an oceanic climate with high precipitation, particularly in late summer. There are a number of rivers on the territory of Luxembourg: the Alzette, the Attert, the Clerve, and the Wiltz. The border between Luxembourg and Germany is formed by three other rivers: the Moselle, the Sauer, and the Our.

Natural hazards

The exposure to natural hazards together with response capacity determines the potential impact a natural hazard might have on a region. Luxembourg is exposed to a limited number of natural hazards. According to the Brussels based Centre for Research of the Epidemiology of Disasters (CRED), the most common natural disaster is a storm (see Table 1). It is also one of the most recurring natural disasters. In addition to storms, floods happen in Luxembourg as well. The last flood occurred about a decade ago and it was also one of the most costly natural hazards. Among other natural disasters occurring in Luxembourg, the year 2003 was marked by a heat wave which resulted in the loss of 170 people¹⁵⁷⁴. Between 1980 and 2010 there were 8 storms, 2 floods and 1 heat wave, where only heat wave resulted in mortality.¹⁵⁷⁵

Table 18 Top 10 Natural Disasters in Luxembourg by economic damages between 1990 and 2014.

Disaster	Date	Damage (000 US\$)
Storm	25-1-1990	90 000
Storm	3-2-1990	90 000
Storm	25-2-1990	90 000
Storm	28-2-1990	90 000
Storm	28-2-2010	31 000
Flood	20-12-1993	10 000
Storm	21-1-1995	10 000
Storm	7-2-1990	5 000
Storm	13-2-1990	5 000

Source: The OFDA/CRED International Disaster Database, www.em-dat.net.

The World Risk Report¹⁵⁷⁶ estimates that Luxembourg has a risk index of 2.52% of natural disasters where risk is understood as an interaction between a natural disaster (earthquakes, floods, cyclones, droughts, sea level rise) and the vulnerability of societies. Luxembourg is located at place 153 out of 171 countries evaluated (meaning that country 171 has the least risk). This implies that even though

¹⁵⁷⁴ The data are retrieved from The OFDA/CRED International Disaster Database, www.em-dat.net.

¹⁵⁷⁵ The data are retrieved from the website of PreventionWeb, serving the information needs of the disaster reduction community (<http://www.preventionweb.net/english/countries/statistics/?cid=102>).

¹⁵⁷⁶ Alliance Developments Work (2014), 'World risk report 2014'.

the population of Luxembourg is vulnerable to natural hazards, the country has the abilities and capabilities to cope with such hazards.

Technological hazards

In terms of technological disasters, the Brussels based Centre for Research of the Epidemiology of Disasters (CRED) reports only one technological disaster in the past hundred years. In 2002 there was an air transport accident which led to 20 people being killed with no economic damages involved. The newspapers also report a railway accident close to Franco-Luxembourg border with 6 people killed and 20 wounded.

Table 19 Top 10 Technological Disasters in Luxembourg between 1990 and 2014.

Disaster	Date	Number of people killed
Transport Accident	6-11-2002	20
Transport Accident	11-10-2006	6

Source: The OFDA/CRED International Disaster Database, www.em-dat.net;
<http://www.lesentiel.lu/fr/news/luxembourg/story/il-y-a-5-ans--la-collision-de-train-faisait-six-morts-25451005>.

Luxembourg has no nuclear installation on its own territory. There are also no facilities on the territory of Luxembourg generating radioactive substances. As a result Luxembourg does not use nuclear fuel. Thus radioactive wastes are only generated from the industries. However, there are three nuclear plants that are located nearby Luxembourg: Tihange (65 km, located in Belgium), Chooz (70 km, located in France) and Cattenom (8.5 km, located in France as well) as presented on the Figure 1. Since the nuclear plant Cattenom is located in a close range to the country, the government of Luxembourg '*...attaches great importance to the protection of the population in the event of a severe accident at the nuclear power plant at Cattenom*'¹⁵⁷⁷. The policy formulated at the national level mainly concerns the population living in the area within a radius of 25 kilometres from the nuclear site Cattenom (this area is extended, if necessary).

¹⁵⁷⁷ Information and Press Service of the Luxembourg Government (2014), 'What to do in the event of a nuclear alert?'.



Figure 33 Schematic location of three closest nuclear plants to Luxembourg¹⁵⁷⁸.

Therefore in short, the main areas of concern for civil protection in Luxembourg are:

- Floods;
- Nuclear accidents;
- Industrial and transport accidents.

Regarding other potential threats that might occur in Luxembourg, the government has prepared several plans on how to respond (in particular in case of pandemic flu and cyber attacks)¹⁵⁷⁹. Currently the risk assessment procedures are being considered to be included in the Draft Law (n. 6475) on the national protection (Projet de loi (no. 6475) relative à la Protection nationale). Formally the risk assessment will be under the authority of High Commission for National Protection (Haut-commissariat à la Protection nationale, HCPN). Though, since Luxembourg does not suffer from natural hazards very often, the risk assessment procedures take place when the threat of a disaster or a major risk is identified.

¹⁵⁷⁸ Schematic location of the location of the nuclear plants is prepared by the authors of this report. More about the nuclear plants in France and Belgium can be found here https://www.edf.fr/groupe-edf/producteur-industriel/carte-des-implantations#!field_poi_type_1=367&id=rzr-poi-behavior-filter-form, <http://www.chooz.com/En/entreprendre/centrale.cfm>, <https://www.electrabel.com/en/corporate/nuclear-power-plant-belgium/doel-tihange>.

¹⁵⁷⁹ For more details please refer to Chapter 1.2.5.

1.2 Policy and Governance

Currently, national protection and crisis management functions are distributed across multiple governmental organisations, largely depending on the nature of the disaster and risk involved. The following organisations are involved in natural or man-made crisis management:

- **The High Commission for National Protection;**
- **The Ministry of Labour Employment and Immigration, the Inspectorate of Labour and Mines;**
- **The Ministry of Interior;**
- **The Rescue Service Agency;**
- **The Ministry of Health;**
- **The Grand Ducal Police;**
- **The Army.**

Besides listed organisations, other institutions might be involved in resolving a disaster or crisis as well depending on its nature. The composition and methods of operation and organizational structure of the national protection system are determined by Grand Ducal Regulation. The approach to crisis management currently is being reconsidered and a new law is expected to be passed in the near future (see more in Chapter 2 with regard to the new law being adopted). Now the crisis mechanisms are placed under the authority of the Prime Minister.

1.2.1 Strategy scope and focus

There are a limited number of natural risks that Luxembourg is exposed to. Therefore the crisis management system mostly focuses on man-made risks.

A number of organisations are involved in shaping the strategy regarding crisis management in Luxembourg. The main feature of the policy is that it is case-by-case based, meaning that the policy is formulated when a crisis occurs.¹⁵⁸⁰ For several cases, like a pandemic flu, nuclear accident and cyber attack, the government has developed several plans on what to do in case such a disaster occurs.¹⁵⁸¹ Currently, the crisis management system in Luxembourg is in the process of changing (see more in Chapter 2 with regard to the new law being adopted). At this point, the crisis management system is mainly focused on preparedness and response activities which can be seen in the plans as well¹⁵⁸². It is envisaged that the new crisis management policy is going to focus on the prevention and planning activities as well as post-disaster assessment according to the expert interviews.

The Supreme Council for National Protection (Conseil Supérieur de la Protection nationale, CSPN) determines the mainstream policy regarding crisis management defines objectives and ensures strategic control during the policy implementation, while the authority of command and decision is in

¹⁵⁸⁰ See more details in rest of this Chapter and Chapter 2.

¹⁵⁸¹ See more details in Chapter 1.2.5.

¹⁵⁸² See more details Chapter 1.2.5.

the hands of the Crisis Cell (Cellule de Crise). Depending on the crisis or disaster happening, the Crisis Cell may be formed from different bodies as opposed to the CSPN which is always composed of the same members. For example, in case of a pandemic disease the Ministry of Health is going to take the lead together with the in the prevention and disaster resolution planning.

The High Commission for National Protection (Haut-commissariat à la Protection nationale, HCPN) develops and coordinates a national strategy in crisis management under the authority of the Prime Minister. The HCPN is responsible for the coordination amongst all the ministries, departments and services involved in civil and military crisis management. Since February 2007, the High Commissioner for National Protection (Haut-Commissaire de la Protection Nationale) is in charge of coordinating the fight against terrorism at the national level as well.¹⁵⁸³

1.2.2 Monitoring and analytical support to policy making; R&D

The Supreme Council for National Protection (Conseil supérieur de la Protection nationale, CSPN) is a consultative body for the overall national protection in Luxembourg. The main mission of the Council is to assist and advise the government. It can also issue an opinion paper on any project related to national protection. The CSPN initiates, coordinates and monitors the implementation of measures and activities to prevent and anticipate the occurrence of a crisis. The members of the CSPN meet at least two times a year¹⁵⁸⁴.

The Council consists of one delegate from each Ministry and directors (or heads) of other administrations and services involved in crisis management. Depending on the nature of the crisis, the composition of the Crisis Cell might differ consisting of the members of the CSPN that are concerned by the incident. The following parties are involved (the list is not exclusive):

- The High Commission for National Protection;
- Representative of the Ministry of Interior Affairs;
- The Director of Police;
- Chief of the Army;
- The Director of the Customs and Excises;
- The Director of the Intelligence Service;
- The Director of Information and Press;
- The Director of Health;
- The Director of the Rescue Service Agency.

Besides the CSPN, there are specific committees that consult in specific domain and are chaired by the High Commissioner for National Protection¹⁵⁸⁵.

In terms of research projects implemented in the past, the government of Luxembourg has participated in the development of the risk assessment tool Monarc¹⁵⁸⁶ for processing of sensitive

¹⁵⁸³ The information is adapted from <http://www.hcpn.public.lu/HCPN/Historique/index.html>.

¹⁵⁸⁴ The information is adapted from http://www.hcpn.public.lu/Protection-nationale/Concept_-organisation-et-fonctionnement/Conseil-superieur-a-la-Protection-Nationale/index.html.

¹⁵⁸⁵ For more information about the High Commission for National Protection see Chapter 3.

and personal information. This tool assesses the risks, determines the level of criticality for the organisation and describes the possible consequences for the organisation. If the organisation uses such a tool, it will obtain a certification of ISO/IEC 27005 standard (Information technology – Security techniques – Information security risk management).

Currently, the University of Luxembourg is also involved in a collaborative research project ‘Seamless Communication for Crisis Management for EU safety’ (SECRICOM) with the aim is to develop a reference security platform for EU crisis management operations¹⁵⁸⁷.

1.2.3 Policy for Prevention

As it has already been mentioned Luxembourg is mainly exposed to storms and floods in terms of natural disasters. With regard to that, different preventive measures have been taken by the authorities in relation to country planning and regional development: for example, dykes and retention basins have been constructed. There are also frequent automatic checks of the river levels and radiological activity performed and when needed early warning systems towards professionals are used. The following early warning systems are currently in place¹⁵⁸⁸:

- MIC- Monitoring Information Centre, CECIS network of the European Commission
- ECURIE - European Community Urgent Radiological Information Exchange for Nuclear Emergencies (Radiological/Nuclear)
- RAS BICHAT- Rapid Alert System for Biological and Chemical Agent Attacks
- EMERCON - Emergency Convention on the mutual exchange of information (IAEA)
- ENAC – Emergency Notification and Assistance Convention (IAEA)
- SELCA – System of exchange and liaison between Cattenom and authorities (dedicated information system between France, Germany and Luxembourg on events in the French PWR Cattenom)
- UNECE-IAN– Industrial Accident Notification of the United Nations Economic Commission for Europe, Convention on the Transboundary Effects of Industrial Accidents
- Commission of the Rhine (alert and mutual information in case of accidental pollution of the river Rhine): www.iksr.org
- Commission of the Moselle and Saar (alert and mutual information in case of accidental pollution of the rivers Moselle and Saar): www.iksms-cipms.org
- Commission of the Maas (alert and mutual information in case of accidental pollution of the river Maas): www.cipm-icbm.be
- Dedicated alert and information system between France, Germany and Belgium on transboundary floods: www.timisflood.net.

At the moment, there is no national agency in charge for the formulation of the policy for prevention. The policy is envisaged to be included in the new legislation regarding the crisis management system. Formally the prevention procedures will be under the authority of High

¹⁵⁸⁶ The information has been obtained through the website of CASES (www.cases.lu), that is operated by the SMILE (Security made in Lëtzebuerg GIE; this organization operates the Computer Incident Response Center Luxembourg, CIRCL).

¹⁵⁸⁷ For more information about this project please refer to the website www.secricom.eu.

¹⁵⁸⁸ http://ec.europa.eu/echo/files/civil_protection/vademecum/lu/2-lu.html.

Commission for National Protection. Since the Supreme Council for National Protection is an advising body to the HCPN, it will also play a consultative role when a policy for prevention is being prepared.

1.2.4 Policy for Preparedness

The government of Luxembourg has prepared several plans on how to respond to an emergency¹⁵⁸⁹. These plans are publicly available on the website (<http://www.infocrise.public.lu/fr/index.html>), which was launched in October 2014. This website provides up to date information in case an emergency or crisis is taking place and offers documents and plans on the procedures. This website serves as a basis for the public being prepared to respond to the crisis. The Information and Press Agency of the government is responsible for provision of the information on [infocrise.lu](http://www.infocrise.lu). The Rescue Service Agency (Administration des services de secours, ASS) also keeps the public informed on the measures to be undertaken in case of floods taking place. The information is provided on the website www.112.public.lu. In addition the ASS operates the nationwide network of electronic sirens warning the population in case an accident or crisis might take place.¹⁵⁹⁰

1.2.5 Policy for Response

As soon as a crisis is identified, the Crisis Cell (Cellule de Crise) starts to function under the authority of the Prime Minister. The Prime Minister is also assisted by HCPN which ensures the inter-ministerial communication and coordinates the measures taking place in case of a crisis. Each minister is responsible for reviewing their area of activity. For example, the Ministry of Health is responsible in case of a pandemic arises.

The Rescue Service Agency leads the rescue operations and reports to the Minister of Interior. The Agency is responsible for implementation of all the measures and means necessary for protection and supply of aid and medicines¹⁵⁹¹. The fire brigades are coordinated at local level by the municipalities. In case of a larger crisis the operational lead is in hands of the Rescue Service Agency. Currently, this set up is under discussion and subject to change. It is envisaged that the Rescue Service Agency and the fire brigades are going to be combined under authority of one governing body according to the expert interviews.

The Rescue Service Agency is also responsible for recruiting and training instructors and volunteers. The recruited volunteers then compose the brigades of ambulance-emergency-rescue workers (brigades des secouristes-ambulanciers et des secouristes-sauveteurs) which are based in the relief centres established around the country to ensure the protection and rescue of people. Figure 2 shows the location of the different relief centres.

¹⁵⁸⁹ The following plans are adopted at the moment: (1) the Influenza pandemic plan, (2) Ebola emergency intervention plan, (3) Cyber Plan and (4) Emergency Response Plan in case of a nuclear accident. See more details about the adopted plans in Chapter 1.2.5 and in Chapter 4.2.

¹⁵⁹⁰ For more information see Chapter 1.6.

¹⁵⁹¹ For more details please refer to Chapter 3.

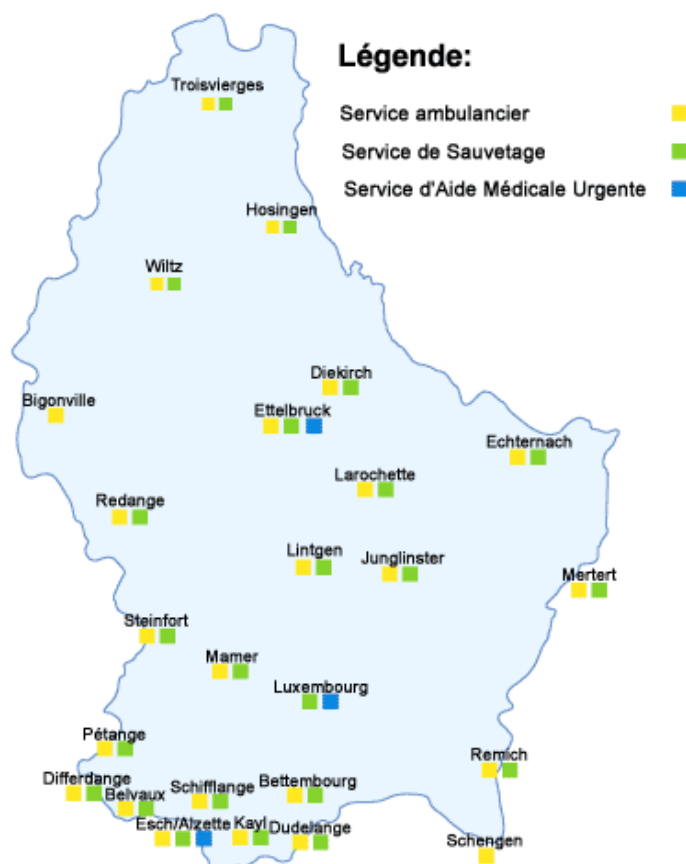


Figure 34 Location of the relief centres in Luxembourg.¹⁵⁹²

¹⁵⁹² Rescue Services Agency, www.112.public.lu.

At the moment this report was under preparation¹⁵⁹³ several plans were adopted on how to tackle different crises: (1) the Influenza pandemic plan, (2) Ebola emergency intervention plan, (3) Cyber Plan and (4) Emergency Response Plan in case of a nuclear accident. All these plans are publicly available on the new website (infocrise.public.lu) which was launched in October 2014. For more details about the plans see Chapter 4.2.

1.2.6 Policy for Relief and Recovery

As soon as the crisis is materialised, the alarming system (in case of flooding and nuclear accident), information on the website (infocrise.lu) and media informs the population about the crisis. Then begins the post-accident phase dedicated to the treatment of consequences of the accident. Since the number of disasters in Luxembourg is rather limited, at the moment the main focus of the policy is on the response activities. Therefore there is no specific policy for relief and recovery. Such policies are formulated on case-by-case basis.

1.3 Financing

1.3.1 Investing in preparedness

The Rescue Service Agency (under authority of the Ministry of Interior) and High Commission for National Protection and Computer Emergency Response Team (under authority of the Prime Minister) are funded by the state budget allocating predefined credits on a yearly basis. The Department of Radiological Protection, which is a part of the Ministry of Health, is also financed through the state budget.

The government of Luxembourg may provide additional budgetary resources through some other organisations which can be released in case of an emergency, crisis or disaster. When a crisis occurs the organisations come to live and the amounts budgeted can be enlarged with the necessary amounts (the predefined credits established on a yearly basis are not limited which allow to cover important non-foreseen and thus not predictable costs). When a crisis is identified and the Crisis Cell is activated additional financial resources are allocated. When a crisis has not been foreseen and if the crisis resolution financing can be put under a budget of the next year, it will be financed from the next year and most likely by the Ministry of State. In other cases, the decision on the financial allocation is taken after the consultation with the HCPN¹⁵⁹⁴.

One of the important elements of being prepared for a disaster is the provision of trainings in various fields of protection. The trainings are mainly given by the National School of Civil Protection and the National School for Fire and rescue Services which are both managed by the Rescue Service Agency. Most of the budgeted activities for crisis management have decreased since 2012 with the exception of the Department of Radiological Protection (see Table 1.3).

¹⁵⁹³ The report was prepared in August – December 2014.

¹⁵⁹⁴ This information is obtained via the expert interviews.

Table 20 Budgeted activities for the Rescue Service Agency, High Commission for National Protection and Computer Emergency Response Team based on the adopted budgets of 2012 – 2014 (in euros).

Budget article	2012	2013	2014
High Commission for National Protection			
Operating costs; Office expenses; Miscellaneous expenses	46.617	50.000	45.000
Office of National Protection: operating costs for crisis management. (Credit not limited)	—	1.000	35.000
Acquisition costs for crisis management. (Credit not limited)	—	1.000	1.000
Acquisition costs of special equipment, office and telecommunication	19.387	17.200	12.000
Computer Emergency Response Team			
Acquisition and installation of special equipment	94.747	150.000	75.000
Implementation and operating costs of management and prevention operations of the fight against cybercrime. (Credit not limited)	575.351	535.000	480.000
Rescue Services Agency			
Rescue Services Agency (regular budget expenditures)	16.147.449	16.291.442	16.793.967
- Including support costs arising from a disaster in the framework of bilateral agreements. (Credit not limited); and	—	100	100
- Education and training costs for volunteers of Civil Protection	124.420	128.500	125.000
Rescue Services Agency (Extraordinary expenses)	5.086.308	4.485.412	4.937.573
Division of Radioprotection of the Ministry of Health			
Costs of renting a room for interim storage of not usable radioactive sources. (Credit not limited)	3.750	3.750	3.750
Measures to reduce irradiation in Luxembourg	17.120	25.000	20.000
Costs of expertise as part of the authorization procedures and within the framework of conventions, treaties and international agreements. (Credit not limited)	—	100	100
Maintenance costs of equipment. (Credit not limited)	38.240	37.000	40.000
Radioactivity monitoring costs; miscellaneous expenses. (Credit exercise without distinction)	137.377	115.000	117.000
Acquisition, storage and distribution of stable iodine. (Credit not limited)	—	25.000	100
Quality assurance of measuring equipment in the field of radiation protection and radiation physics lab	39.949	45.000	45.000

Source: Projet No 05/2014-1 5 mars 2014, Texte du projet Projet de loi concernant le budget des recettes et des dépenses de l'Etat pour l'exercice 2014; Budget de l'Etat: Loi du 29 avril 2014 concernant le budget des recettes et des dépenses de l'Etat pour l'exercice.

1.3.2 Investing in consequence management

The beneficiaries of the response measures and the respective financial resources are (mainly) national authorities and municipalities. Since the crisis management policy is mostly case-by-case based, the decision on the financial resources for consequence management is also taken on case-

by-case basis. The involvement of European Union funding can be involved in consequence management. The decision on this is taken considering the nature of the crisis or disaster at stake.

Funding of the Division of Fire and Rescue Services of the Rescue Service Agency is partially provided through insurance against risk of fire¹⁵⁹⁵. At the individual level the material damages are reimbursed based on the personal insurance policies.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Currently there is no official framework or system in place for assessing the combating of individual emergencies and disasters. At present, the post-disaster assessment is happening at the level of the organisations that were involved in the crisis response after the disaster took place. This way the individual emergencies and disasters are evaluated on case-by-case basis.

1.4.2 Departmental Lessons Learned systems

Currently there is a Lessons Learned system at the CSPN level. The organisations that were involved in crisis handling assess the lessons learned from the specific disaster resolution and seek for the ways to improve it. Moreover, there is an exchange of the experience and techniques as a result of, for example, the international exercises. Thus the exchange of information is happening on the operational level¹⁵⁹⁶.

1.4.3 Centralised (national) Lessons Learned system

HCPN is in charge of the Centralised Lessons Learned system. In practice, there is an exchange of information on the departmental level and inter-departmental level and intra-departmental level (for more details on this please refer to Chapter 1.4.2). The experience gained from personnel deployed in EU and other international exercises is exploited in accordance to the EU guidelines¹⁵⁹⁷.

1.4.4 International exchange for Lessons Learned

Luxembourg participates in international exercises to increase the cooperation, procedures and services and capabilities of supporting members. During those exercises there is an exchange of experience and techniques happening that are later incorporated in the crisis management system of Luxembourg. For example in 2013 Luxembourg took part in TRIPLEX 2013¹⁵⁹⁸, OPEX¹⁵⁹⁹, SIMEX 'Count

¹⁵⁹⁵ Ministère de l'Intérieur (2013), Rapport d'activité 2013.

¹⁵⁹⁶ This information is obtained via the expert interviews.

¹⁵⁹⁷ This information is obtained via the expert interviews.

¹⁵⁹⁸ <http://www.ihp.nu/news/60-triplex-2013-major-cyclone-hits-german-danish-border-area.html>.

¹⁵⁹⁹ http://www.thw.de/SharedDocs/Meldungen/EN/Uebungen/national/2013/03/meldung_001_opex_bravo.html?nn=927442&categoryId=2&categoryIdValue=944006.

Down¹⁶⁰⁰, ARF DIREX 2013¹⁶⁰¹, Exercices nucléaires 3 en 1¹⁶⁰², NATO CMX¹⁶⁰³, Cybercoalition¹⁶⁰⁴, ENISA Cyber Europe¹⁶⁰⁵.

1.4.5 Regular policy reviews

The crisis management system in Luxembourg is mainly working on case-by-case basis. Therefore, when a plan to solve the crisis is developed, it is foreseen to have a policy review by a workgroup chaired by the HCPN. Other reviews are incorporated in the functioning of the organisations and institutions involved in the crisis management. Currently, the HCPN conducts regular policy reviews.

1.5 Resilience

Since Luxembourg is not exposed to many disasters and in general the number of disasters is very limited every year, there is no official concept of resilience. The concept of resilience mainly concerns the critical infrastructure. According to the interviews, such a concept will be included in the new legislation regarding national protection in Luxembourg. Business Continuity Management is organised by organisations depending on their own risk analysis. The organisations choose by themselves whether they apply any ISO standards like ISO 22301 “Business Continuity Management – Requirements”.

1.6 Information sharing and data protection

Regarding the organisations that set the framework of the data protection, the Act of 2 August 2002 on the protection of individuals¹⁶⁰⁶ with regard to the processing of personal data, established an independent authority, the National Commission for Data Protection (Commission nationale pour la protection des données). The Commission is responsible for verifying the legal base of all files and information about identifiable individuals transmissions and must ensure that the fundamental rights and freedoms of individuals, including their privacy, are respected.

There are a number of laws that regulate the processing of personal data. The Directive 95/46/EC on data protection (Data Protection Directive) is implemented through the Law relating to the protection of individuals in relation to the processing of personal data in 2002 (the Act of 2 August 2002). This law aims to protect the freedom and fundamental rights of individuals, and notably their

¹⁶⁰⁰ <http://www.insarag.org/en/component/content/article/197-earthquake-response-exercise-qcount-downq.html>.

¹⁶⁰¹ <http://www.arfdirex2013.org/>.

¹⁶⁰² <http://www.gouvernement.lu/2816438/28-exercice-cattenom>.

¹⁶⁰³ http://www.nato.int/cps/en/natohq/news_117862.htm?selectedLocale=en&mode=pressrelease.

¹⁶⁰⁴ http://www.nato.int/cps/en/natolive/news_105205.htm?selectedLocale=en.

¹⁶⁰⁵ Ministère de l'Intérieur (2013), Rapport d'activité 2013.

¹⁶⁰⁶ Loi du 2 août 2002 relative à la protection des personnes à l'égard du traitement des données à caractère personnel.

private life, in relation to the processing of their personal data. It was further modified in 2005¹⁶⁰⁷ with regard the specific provisions in the electronic communications sector, as part of the implementation of the EU “telecom package” in Luxembourg.

The Rescue Service Agency, the emergency call centres of the police force and the fire services fall under the specific provisions of the laws when it concerns the data access of sensitive information:

The “112” emergency services centre, the emergency call centres of the Grand Duchy’s police force, and the fire and rescue services of the City of Luxembourg will have [...] automatic access on request and through the Luxembourg Institute of Regulation¹⁶⁰⁸ to the data on the identity of subscribers and users of both electronic communications operators and suppliers and the postal services and the suppliers of these services¹⁶⁰⁹.

The National Commission for Data protection will first check how secure the system is and if it can allow the remote access by electronic communication. The collected data can be transferred within the European Economic Area (EEA). There are special rules that apply to the transfer of data outside the EEA, which can be granted after the National Commission gave permission.

In case of a crisis, relevant authorities might gather personal data after the National Commission has permitted to do so. After the crisis the personal data have to be destroyed. In case of regional disasters, the Rescue Service Agency might collect information from the social media with the help of the police.

Luxembourg provides trainings to a large number of volunteers; therefore they have databases of volunteers with the relevant information stored there. This information is in hands of the organisations that train the volunteers (the Rescue Service Agency) and the relevant databases are created after the National Commission for Data Protection has granted permission.

Usage of social media

The usage of social media to gather information in times of a disaster is rather limited in Luxembourg. The crisis management authorities have several platforms to communicate to the public during the crisis; however they are not used to collect data. The Crisis Cell could decide to use social media to collect data from social media. In case of local crises, the police of Luxembourg, for example, uses social media to collect information from the public. Currently, the adopted emergency response policies (the influenza pandemic plan, the Ebola intervention plan, Emergency Response Plan in case of a nuclear accident in Cattenom, and Plan ‘Cyber’) do not plan to use the social media to gather data during the crisis¹⁶¹⁰.

¹⁶⁰⁷ Loi modifiée du 30 mai 2005 relative aux dispositions spécifiques de protection de la personne à l’égard du traitement des données à caractère personnel dans le secteur des communications électroniques et; portant modification des articles 88-2 et 88-4 du Code d’instruction criminelle.

¹⁶⁰⁸ Institut Luxembourgeois de Régulation.

¹⁶⁰⁹ Loi du 2 août 2002 relative à la protection des personnes à l’égard du traitement des données à caractère personnel.

¹⁶¹⁰ This information is obtained via the expert interviews.

2 Legislation

National Protection in Luxembourg originates from the Grand Ducal Decree of 31 December 1959 concerning the general organization of the National Protection¹⁶¹¹, adopted on the basis of the law of 22 August 1936 authorizing the government to take measures to protect public against the dangers arising from air attacks¹⁶¹².

The Grand-Ducal Regulation of 25 October 1963¹⁶¹³ is currently the statutory basis for the National Protection. 30 years later it seemed that the threat disappeared and the national protection mechanism was put on hold. Following the terrorist attacks of 11 September 2001 in the US, the Permanent Security Committee which was established by Ministerial Decree of 27 January 1975 was reactivated to take protective measures. In the end of 2001 the Office for National Protection has been reactivated. Since 2003 there were several project laws¹⁶¹⁴ regarding national protection drafted.

It is expected in the near future that a new law regarding national protection is going to be adopted which is currently being assessed by the parliament (Projet de loi (no. 6475) relative à la Protection nationale).

¹⁶¹¹ Arrêté grand-ducal du 31 décembre 1959 concernant l'organisation générale de la protection nationale.

¹⁶¹² Loi du 22 août 1936, autorisant le Gouvernement à prendre les mesures propres à protéger la population contre les dangers résultant d'un conflit armé international et notamment des dangers dus aux attaques aériennes.

¹⁶¹³ Règlement grand-ducal du 25 octobre 1963 concernant l'organisation générale de la protection nationale.

¹⁶¹⁴ For example, Projet de loi (no. 6475) which is further described in this Chapter.

2.1 Crisis (emergency, disaster) management concept

The legal hierarchy in Luxembourg is the following:

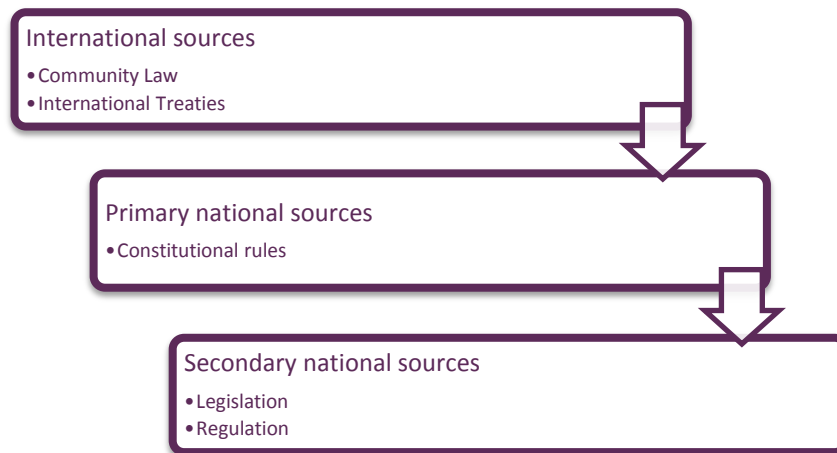


Figure 35 Legal hierarchy in Luxembourg¹⁶¹⁵

There are several main legal acts establishing provisions on crisis management in Luxembourg:

- The Grand-ducal regulation of October, 25th 1963 on the general organization of the national protection (Règlement grand-ducal du 25 octobre 1963 concernant l'organisation générale de la protection nationale);
- The Law of June, 12th 2004 on the creation of an Administration of the Rescue Services (Loi du 12 juin 2004 portant création d'une Administration des Services de Secours); and
- The "*Projet de loi (no. 6475) relative à la Protection nationale*"¹⁶¹⁶ (Draft Law (n.6475) concerning the national protection).

The Draft Law concerning the national protection (Projet de loi (no. 6475) relative à la Protection nationale) is going to set up the whole national protection structure in Luxembourg thus can also be considered as one of the main legal acts regarding crisis management. It is not legally binding yet since it has not been passed the parliament.

Following the chronological order, the Grand-ducal regulation of October, 25th 1963 on the general organization of the national protection constitutes the legal basis on which the national protection mechanism is put in place, albeit only in case of military threat. No further typology of crisis is taken into consideration in this act and the regulation itself cannot be considered a detailed conceptual document (it is only built around 12 articles). The main reason for such a narrow scope is that this regulation finds its legal foundation in the Law of 22 August 1936 authorizing the Government to take measures to protect the population against the dangers of an international armed conflict, including hazards due to air attack (Loi du 22 août 1936, autorisant le Gouvernement à prendre les mesures propres à protéger la population contre les dangers résultant d'un conflit armé international

¹⁶¹⁵ Prepared by authors of this country report.

¹⁶¹⁶ Available at:

http://www.chd.lu/wps/PA_RoleEtendu/FTSByteServletImpl/?path=/export/exped/sexpdata/Mag/148/123/114272.pdf

et notamment des dangers dus aux attaques aériennes) which back then focused only on military threats.

The second legislative act to be considered is the Law of June, 12th 2004 on the creation of an Administration of the Rescue Services (Loi du 12 juin 2004 portant création d'une Administration des Services de Secours) that abrogates the Amended Law of 18 November 1976 concerning the organisation of civil protection (Loi modifiée du 18 novembre 1976 portant organisation de la protection civile). It is worth noting that this law is based on a draft law submitted to the parliament in 1937 and considering the creation of a Civil Protection Mechanism.

The aim of the law is to organize the Rescue Service Agency (Administration des Services de Secours, ASS) whose role is to implement those acts necessary to protect and aid the people affected (by the event) and protect their goods in case of calamities, catastrophes, major incidents, fires or floods. More than a conceptual document, this law and its implementing regulations are meant to provide an administrative framework of the activities of the ASS (e.g. administrative division, tasks, career paths, roles, etc...). The ASS itself is put in place in order to group under one administrative body the coordination of all the services that would be involved in case of emergency (rescue services, fire brigade and medical support). This law however does not specify the relevant notions of calamities, catastrophes or major incidents.

The only legal document considering and developing the concept of "crisis" is the Draft Law (n. 6475). To date (consultation of LegiLux in the October 2014), the law is under reconsideration by the Commission on Institution and Constitutional Revision (since 12/12/2013) that has received the suggestions from the Council of State in terms of political responsibility of the government's members in the management of the crisis. This document provides clear definitions of a risk, a crisis, crisis management and critical infrastructure:

"Risk" the danger to which the population or the country might be exposed at due to a threat towards which they are vulnerable and that might produce a negative impact on the population or the country.

"Crisis" all event that by its very nature or effect would:

- *Threaten the vital interests or the basic need of all or a part of the country and of the population;*
- *Require urgent decisions*
- *Require a national-level coordination of the different ministries, administrations, services and organisms as well as, if needed, international coordination.*

"Crisis Management" the whole of the measures and activities undertaken by the competent authorities in order for them to ensure the fulfilment of their tasks and missions.

“Critical Infrastructure” every point, system or part of system that is fundamental for the safety of the vital interests or the basic need of a part or the whole of the country or the population and which is a source of risk or it may be the object of a particular threat¹⁶¹⁷.

Furthermore, in the section “Notes to the articles” it is specified that the activities of crisis management include the achievement of a series of complementary components, including risk analysis, preparation, prevention, monitoring, protection, communication, response, victim support, recovery and feedback. The measures under the crisis management include reduction of threats, vulnerabilities and impacts, increase in the predictability and reduction of the likelihood of a crisis.

2.2 General crisis (emergency, disaster) management law

According to the Draft Law (n. 6475) the present situation in Luxembourg is the following:

Concerning all the risks that go beyond the routine management, a wide array of the instruments necessary to cope with them is at present lacking, especially in terms of formal coordination among the public and private services meant to prevent or to tackle a possible threat. It is worth pointing out that most of these risks have an international nature and that European mechanisms are being progressively put in place to cope with them, whilst Luxembourg does not have yet an organ formally in charge of the coordination with the crisis centres from other states or international organizations¹⁶¹⁸.

The current legal national protection mechanism is based on the Grand-ducal regulation of October, 25th 1963 on the general organization of the national protection. It establishes that in case of a crisis (only defined here as coming from a military threat), the Government organizes the response by constituting the Ministerial Committee for National Protection (Comité Ministériel de Protection Nationale, CMPN).

This setup was frozen in 1994 when it became clear that the end of the Cold War had implied the end of the major military threat and thus of the usefulness of the CMNP. Nevertheless, after the 9/11 attacks, the Council of Government decided to revert its previous decision. As a result it resumed the national protection mechanism (December 2001¹⁶¹⁹) and unveiled a project to create a crisis management structure based on this setup (which is detailed in the Draft Law (n. 6475) regarding national protection). The organization and the functioning of this structure is detailed below.

As soon as a disaster is materialising in Luxembourg, the Crisis Cell starts functioning and its president, the Prime Minister, guides it. The president is assisted in this task by the National Protection Superior Committee (Conseil Supérieur de la Protection Nationale, CSPN). It used to be the case that CSPN was composed of a representative from each of the CMPN members (mostly from each Ministry as well as the Army and other organisation involved in crisis management) which

¹⁶¹⁷ Projet de loi (no. 6475) relative à la Protection nationale, Chapter 2, Article 2, Notes to the articles.

¹⁶¹⁸ Projet de loi (no. 6475) relative à la Protection nationale.

¹⁶¹⁹ Mentioned in <http://www.hcpn.public.lu/HCPN/Base-legale/index.html>

started its functioning as soon as the crisis has been identified. The CSPN also coordinates the work of the National Committees (Comités Nationaux, CONAT) that are in charge of specific functional areas.

The president is also assisted by the High Commissioner for National Protection (Haut-Commissaire de la Protection Nationale). The Commissioner assures the secretarial functions of the CSPN and chairs the High-Commissariat for National Protection (Haut-Commissariat de la Protection Nationale, HCPN). The HCPN advises the Prime Minister on:

- The preparation of the necessary national resources;
- The protection of the authorities and of the population;
- The maintaining of the public order, the provision of psychological and informational support;
- The potential financial problems¹⁶²⁰.

This complex structure linking all the actors through their functional/hierarchical relationship is presented in a Figure 4:

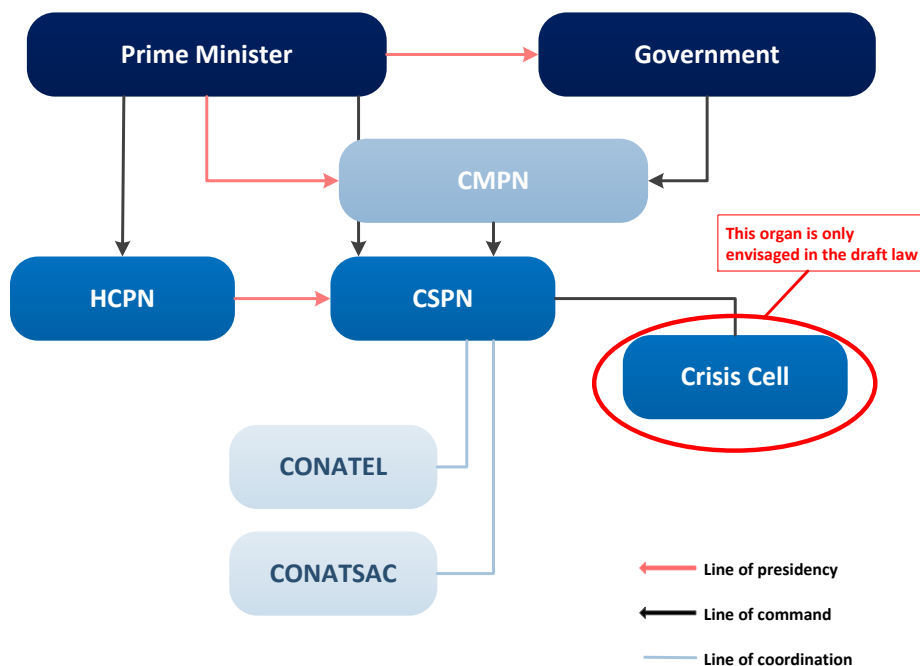


Figure 36 Structure of the crisis management in Luxembourg.¹⁶²¹

Currently, there is no formal institution that brings altogether the high-level participants of the crisis resolution in case of a disaster or major accident or incident. Because of this reason, the setup is criticised in the Draft Law (n. 6475)¹⁶²². Therefore the Draft Law envisages the existence of a body

¹⁶²⁰ Projet de loi (no. 6475) relative à la Protection nationale.

¹⁶²¹ This is a structure according to the current regulation where draft law is Projet de loi (no. 6475).

¹⁶²² Article 4 of Projet de loi (no. 6475) states that “les ministères, administrations et services publics susceptibles d’intervenir en cas d’incident ou de catastrophe disposent individuellement d’une panoplie de moyens propres. Ces moyens seront désormais, en cas de déclenchement des mécanismes de gestion de crise prévus par la loi, à la disposition de la Protection nationale. Face à une crise imminente ou pendant une crise, il

(Crisis Cell). This body will have the role of developing, coordinating, implementing and monitoring the implementation of measures with the primary goal to act and respond quickly.

In preparation of the upcoming Law, the CSPN had adopted internal rules regarding its functioning. This document has been approved by the government. It is however only available to the members of the Supreme Council.

Another legally binding document is the Law of June, 12th 2004 on the creation of the Rescue Service Agency. It covers the organizational void mentioned in the draft law (see above) in case of exceptional situations (described as calamities, catastrophes, major incidents, fires or floods) by granting the Ministry of Interior Affairs the role and the power to coordinate all the services and actors meant to organize first aid measures (mesures de secourisme). The Law states that the actors and services performing and leading the operations in case of exceptional situation are the three divisions of the ASS:

- The Division of Civil Protection, acting in case of exceptional events (calamities, catastrophes, major incidents, fires or floods);
- The Division of Fire and Rescue Services; and
- The Administrative, Technical and Medical Division.

The measures that are subject to the ASS intervention are generally defined to be as those acts necessary to protect and aid the people affected and protect their goods in case of calamities, catastrophes, major incidents, fires or floods. They are detailed in the Grand Ducal Regulation of 6 May 2010 determining the specific tasks, composition, organization and functioning of the Division of Civil Protection of the Rescue Service Agency (Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours). Figure 5 presents the organizational structure of the Rescue Service Agency.

This regulation states that the ASS is responsible for the organization of the first aid, rescue and transport of victims needing medical care. It also sets up or contributes to general and individual intervention plans and organizes public training in first aid. Lastly, in case of crisis it has the duty to safeguard the national heritage and property.

Furthermore, the regulation also states that in case of a crisis an Alert group is activated. The mission of the group is to ensure in times of crisis or war the operation of the warning centres that fall under the authority of the Rescue Service Agency¹⁶²³. The alert group is guided in accordance with the guidelines and instructions laid down by the Rescue Service Agency.

est nécessaire de disposer d'un organe regroupant des délégués de haut niveau et par conséquent mandatés pour développer, coordonner, mettre en oeuvre et veiller à l'exécution des mesures destinées à agir et à réagir rapidement. A l'heure actuelle, un tel organe fait défaut. La Cellule de Crise assumera cette responsabilité" (p.4).

¹⁶²³ Loi du 12 juin 2004 portant création d'une Administration des Services de Secours, Article 11, 14.

The Rescue Service Agency is also qualified to recruit and train the instructors and volunteers of the assistance units and in the various fields of protection. In addition, it manages the National School of Civil Protection (l'Ecole Nationale de la Protection Civile, ENCP), which instructs volunteers in weekend training courses and the National School for Fire and Rescue Services (l'Ecole Nationale du Service d'Incendie et de Sauvetage, ENSIS) including training with heavy intervention equipment¹⁶²⁴.

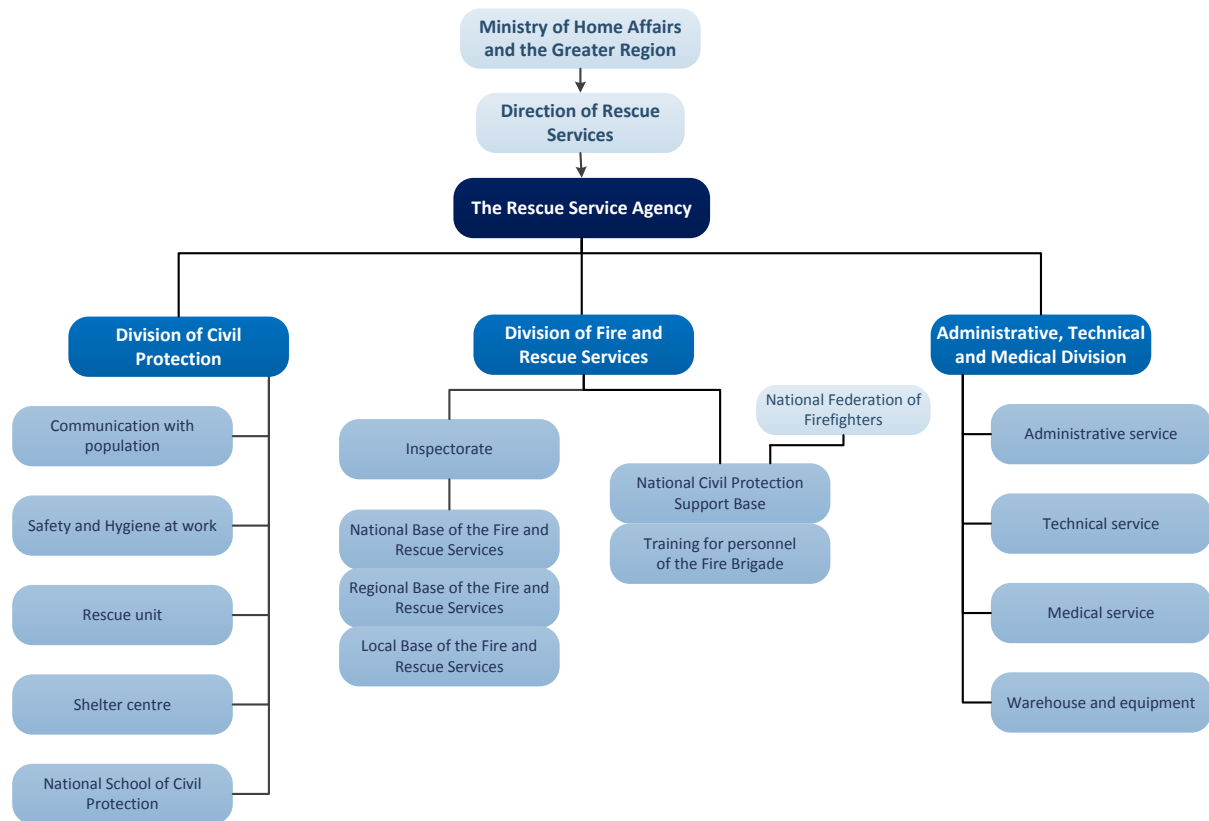


Figure 37 Organisational structure of the Rescue Service Agency¹⁶²⁵.

The Draft Law (n. 6475) regarding the National Protection

The aim of the Draft Law (Projet de loi (no. 6475) relative à la Protection nationale) is to enhance the crisis management mechanism. The draft law further details and extends the structure of the National Protection as it is actually in place. In particular, it establishes a Crisis Cell (Cellule de Crise, CC). The CC will have the responsibility of coordination during a major crisis or a disaster. Besides that, it will prepare the political decisions to be taken by the Government, implement the operational measures and control their execution. From the standpoint of its composition, it will be characterised by a variable geometry, depending on the nature of the attack. Ministries, departments and agencies that provide operational resources will thus be fully involved in the coordination process and execution. To avoid delays and inefficiencies, agencies and administrations will be required to comply with the instructions of the Crisis Cell and will report directly to it. However, they retain the responsibility in the use of their own resources.

¹⁶²⁴ Adapted from the website of the Rescue Service Agency (www.112.public.lu).

¹⁶²⁵ Adapted from the website of the Rescue Service Agency (www.112.public.lu).

The Crisis Cell initiates, coordinates and monitors the implementation of all measures to cope with the crisis and its effects to return to the normal state. Ministries, departments and services involved in the implementation of measures and activities organized as part of the crisis management by the Crisis Unit shall act in accordance with the instructions thereon and report directly to it.

If an operational intervention in the field is required, the mission of the Crisis Cell is also in charge of the coordination and monitoring of implementation. It may as well designate an authority or a service that coordinates the operations on the ground¹⁶²⁶.

The Draft also establishes that “operating and organizational procedures for the bodies of the National Protection structure can be detailed by a Grand-ducal Regulation” (Projet de loi (no. 6475) relative à la Protection nationale, Article 9). At the time that this report was under preparation, the Draft Law had not been passed by the parliament.

2.3 Emergency rule

According to the Law of June, 12th 2004 on the creation of the Rescue Service Agency, the Ministry of Interior can resort to special powers in case of exceptional situations (calamities, catastrophes, major incidents, fires or floods). Article 7 states that the Minister of Interior may assign a place of temporary residence for threatened or affected population and even restrain them from traveling or moving in case of an emergency. Recovery of the expences by the State will be executed through the Administration of Registration and Domains (l'administration de l'Enregistrement et des Domaines).

Under the Draft Law (n. 6475) no declaration of Emergency Rule (*Etat d'urgence*) is evoked. The only provisions that are considered are those on the necessary requisitions under the Law of 8 December 1981 on requisitions in armed conflict, serious international crisis or disaster (Loi du 8 décembre 1981 sur les réquisitions en cas de conflit armé, de crise internationale grave ou de catastrophe) by the Title V of the Act of 31 May 1999 establishing a body of grand Ducal police and a general inspection of the police (Titre V de la loi du 31 mai 1999 portant création d'un corps de police grand-ducale et d'une inspection générale de la police) and in Chapter 4 of the Municipality Act amended on 13 December 1988 (Loi communale modifiée du 13 décembre 1988).

The extent to which personal liberties can be limited is detailed in every one of the aforementioned acts in different articles. For instance, Article 8 in the Law of 8 December 1981 on requisitions in armed conflict, serious international crisis or disaster states that any person or entity, whether Luxembourgish or foreigner, residing in the Grand Duchy of Luxembourg, may be required to execute tasks of public interest. The government may as well requisition any business or company active on the territory of the Grand Duchy of Luxembourg.

There are several plans adopted by the government of Luxembourg regarding the emergencies and disasters (for more details please refer to 1.2.5):

- the “Influenza Pandemic” Plan;
- The Ebola emergency intervention plan;

¹⁶²⁶ Projet de loi (no. 6475) relative à la Protection nationale, Article 7.

- Emergency Response Plan in case of a nuclear accident;
- Plan 'Cyber'.

In none of the plans reference is made to the Emergency Rule in the legislation¹⁶²⁷. The dispositions concerning potential restrictions on the mobility of the people in the areas concerned are very limited. In case of an accident in a nuclear plant, the authorities may prohibit any outdoor activity. This action is taken as a precaution to protect the population against exposure to or contamination of radioactive releases. The activities of concern are sports and games for children outdoor, hunting, camping, gardening, etc. This also relates to the post-accident phase. Several countermeasures are envisaged in case of a pandemic, but none of them is concretely restrictive for the civil liberties.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

In the present organisational setup, the national protection is assured by the Rescue Service Agency, whose legal base is the Law of 12 June 2004 on the creation of an Administration of the Rescue Services (Loi du 12 juin 2004 portant création d'une Administration des Services de Secours). This document sets up the legal framework enabling the Agency to act in case of exceptional situations (calamities, catastrophes, major incidents, fires or floods).

Also, from the point of view of specificity, the abovementioned Emergency Plans on Nuclear Accidents and Pandemic Flu can be considered under this section (the pandemic flus can be of several sorts, the specific plan was born to counter the H1N1 pandemic but is conceived as an adaptive document).

The legal bases and the plans are respectively¹⁶²⁸:

Radiologic emergency:

- Grand-Ducal Regulation of 14 December 2000 on the protection of the public against the dangers arising from ionizing radiation (Règlement grand-ducal du 14 décembre 2000 concernant la protection de la population contre les dangers résultant des rayonnements ionisants).
- Emergency Response Plan (ERP) in case of nuclear accident (Plan d'intervention d'urgence (PIU) en cas d'accident nucléaire).

Pandemic Flu:

¹⁶²⁷ The legal base is constituted by Règlement grand-ducal du 14 décembre 2000 concernant la protection de la population contre les dangers résultant des rayonnements ionisants and Plan d'intervention d'urgence (PIU) en cas d'accident nucléaire; Règlement grand-ducal du 11 mai 2006 établissant des mesures de lutte contre l'influenza aviaire, Plan gouvernemental - Pandémie grippale; Plan d'intervention d'urgence Cas probables/confirmés EBOLA au niveau national.

¹⁶²⁸ The information on the Cyber Plan (Plan d'intervention d'urgence en cas d'attaque contre les systèmes d'information ou de faille technique des systèmes d'information, Plan 'Cyber') is presented on the website of HCPN (http://www.hcpn.public.lu/plans_nationaux/Plan_-_Cyber_/index.html).

- Grand-Ducal Regulation of 11 May 2006 establishing measures against avian influenza (Règlement grand-ducal du 11 mai 2006 établissant des mesures de lutte contre l'influenza aviaire).
- Grand-Ducal Regulation of 22 October 2009 concerning the processing centres and vaccination centres under the management of an influenza pandemic (Règlement grand-ducal du 22 octobre 2009 relatif aux centres de traitement et aux centres de vaccination dans le cadre de la gestion d'une pandémie grippale).
- Government Plan - Influenza Pandemic (Plan gouvernemental - Pandémie grippale).

Ebola plan:

- Emergency Response Plan to Ebola (Plan d'intervention d'urgence Cas probables / confirmés EBOLA au niveau national, Plan EBOLA).

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The local authorities are actively involved in the Fire and Rescue Services Division of the Rescue Service Agency. The Coordinated text of the Municipality Act of 13 December 1988 (Texte coordonné de la loi communale du 13 décembre 1988) speaks of local fire and rescue corps (Services communaux d'incendie et de sauvetage) whose management (provision of adequate structures and equipment) is delegated to the local authorities. However, the law establishes that these locally organised bodies must not hamper in any way the national and regional organisation put in place to coordinate them (i.e. it should not overlap with or disturb the work of the ASS). Article 100 of the municipality act states that without prejudice to national and regional structures of civil protection, each municipality is required to create or maintain a fire and rescue department with at least one corps of volunteers and professional firefighters and having the facilities and equipment needed.

Another division of the ASS has operational centres at national, regional and local level. The local centres are under authority of ASS and not under authority of the local municipalities. There are one national, three regional and 25 local support bases of Division of Civil Protection. This structure is established by the Law of 12 June 2004 on the creation of an Administration of the Rescue Services (Loi du 12 juin 2004 portant création d'une Administration des Services de Secours) and detailed under the Grand Ducal Regulation of 6 May 2010 determining the specific tasks, composition, organization and functioning of the Division of Civil Protection of Rescue Service Agency (Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours):

The Division of Civil Protection is responsible for the implementation at national level of those measures necessary to protect and rescue the population and safeguard its properties during calamitous events as well as of the application of all those means related to this task. In order to fulfil these tasks, the Division of Civil Protection has a national base, regional bases and rescue centres, whose organization and technical functioning are determined by Grand-Ducal Regulation¹⁶²⁹.

¹⁶²⁹ Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours, Article 4.

Therefore, the local authorities are not entitled with any power in what the management of an emergency situation is concerned. Figure 6 presents the organisational structure specifying the involvement of local authorities.

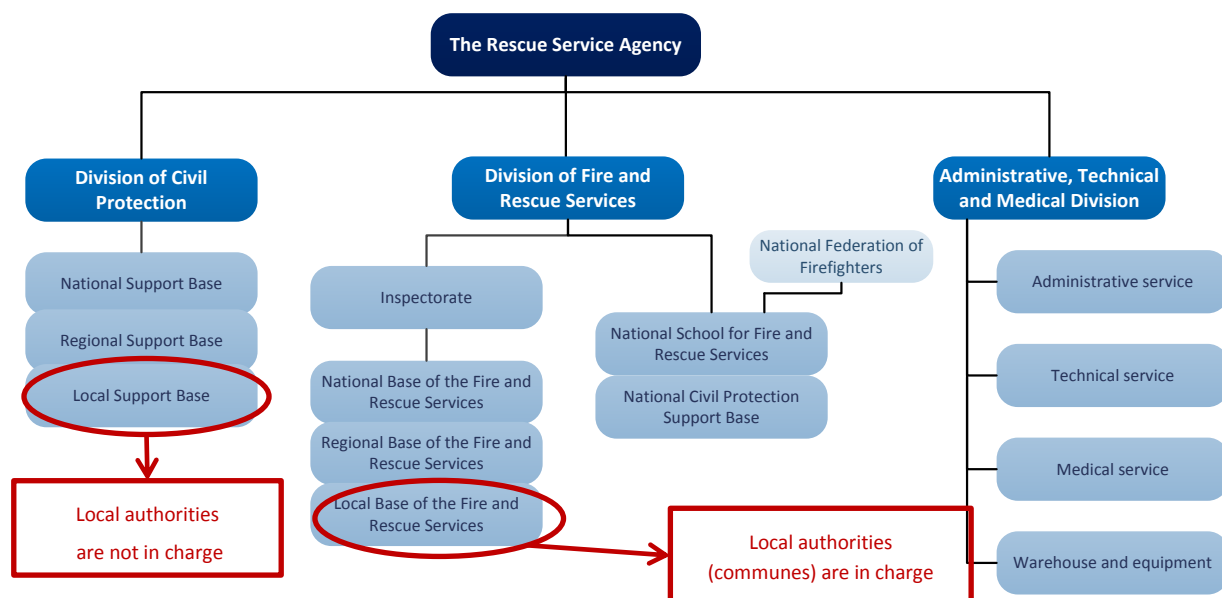


Figure 38 Organisational structure of the Rescue Service Agency with the distinction of authority levels¹⁶³⁰.

Nevertheless, the Law of 8 December 1981 on requisitions in armed conflict, serious international crisis or disaster (Loi du 8 décembre 1981 sur les réquisitions en cas de conflit armé, de crise internationale grave ou de catastrophe, Article 8) establishes that, in case of an emergency, local authorities may have some back-up functions. In the event of a disaster, the mayor (Bourgmestre) of any municipality affected or threatened is entitled to exercise provisionally, in case of emergency, the right to requisition, until the persons like government advisers, delegates of district commissioners, members of the government and delegated persons by the Council of Government (conseillers de Gouvernement et aux commissaires de district délégués par le membre du Gouvernement compétent ainsi qu'aux personnes déléguées par le Gouvernement en conseil) can intervene. In any case, the application of the requisition orders made by the government are always put into effect by the mayor (Bourgmestre).

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The Luxembourgish administration has an official portal providing information on volunteers and NGOs¹⁶³¹. It lists all the organisations through which it is possible to volunteer as well as classifying the volunteering actions by typology. Under the typology "Secours" (rescue), it is possible to find all the opportunities related to rescuing services. Most of them fall under the authority of the ASS.

¹⁶³⁰ Adapted from the website of the Rescue Service Agency (www.112.public.lu).

¹⁶³¹ <http://www.benevolat.public.lu/fr/index.html>.

For what concerns the engagement of volunteers in different divisions of the ASS, the Law of 12 June 2004 on the creation of an Administration of the Rescue Services establishes that the personnel of the ASS may be backed by volunteers. The Grand Ducal Regulation of 6 May 2010 determining the specific tasks, composition, organization and functioning of the Division of Civil Protection of Rescue Service Agency (Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours) details the rights and the requirements necessary for the volunteers. These requirements among other things include age limit, the proof of a good physical condition, a certificate of good conduct, a certificate of adhesion to the group and a certificate of having succeeded in the preparatory course. Also, the attendance to all the other courses and seminars is compulsory. Other specific requirements may be asked depending on the division and groups. Besides that, volunteers in the performance of their duties are entitled to the insurance against accidents and occupational (Article 63, Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours).

The Prime Minister is authorized to subscribe an additional insurance to eventually complement the voluntary workers compensation in case of accidents. In case the volunteers are going outside of the territory of Luxembourg (international crises), the law prescribes that their employers will be reimbursed for the absence.

2.7 Legal regulations for international engagements of first responders and crisis managers

Of all the organisations Luxembourg is member of, the following are relevant for this section:

- The European Union;
- The NATO;
- Benelux.

All these organisations are active in Crisis Management and Civil Protection Mechanisms. Luxembourg is represented in these organisations by the High Commission for National Protection (Haut-Commissariat à la Protection Nationale, HCPN).

There are two main legislative acts connecting Luxembourg to these organisations:

- COUNCIL DIRECTIVE 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection transposed into the national legislation through the Règlement grand-ducal du 12 mars 2012 portant application de la directive 2008/114/CE du Conseil du 8 décembre 2008 concernant le recensement et la désignation des infrastructures critiques européennes ainsi que l'évaluation de la nécessité d'améliorer leur protection.
- The Act of 16 December 2011 approving the Memorandum of Understanding on cooperation in the field of management of crises that may have trans boundary effects between the Kingdom of Belgium, the Kingdom of the Netherlands and the Grand Duchy of Luxembourg,

signed in Luxembourg on 1 June 2006 (Loi du 16 décembre 2011 portant approbation du Mémorandum d'accord concernant la coopération dans le domaine de la gestion des crises pouvant avoir des conséquences transfrontalières entre le Royaume de Belgique, le Royaume des Pays-Bas et le Grand-Duché de Luxembourg, signé à Luxembourg, le 1er juin 2006).

Also Luxembourg has signed, in 2013, two Memoranda of Understanding as a NATO member, namely the:

- Memorandum of Understanding on cyber defence reached between the HCPN and NATO Cyber Defence Management Board (Mémorandum d'entente en matière de cyberdéfense" conclu entre le HCPN et le NATO Cyber Defence Management Board)
- Memorandum of Understanding on the Facilitation of Cross Border Transport of vital importance (Mémorandum d'entente sur la facilitation des transports civils transfrontières d'importance vitale).

In terms of the first responders and civil protection some other legal arrangements have been concluded: the mutual assistance agreements made between Luxembourg and respectively Belgium, Germany and France; Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism. Luxembourg also takes part in the Civil Protection Working Group of the Council (PROCIV), where the ASS is the representative of Luxembourg.

For more information about international cooperation please refer to Chapter 3.2.

3 Organisation

3.1 Organisational chart

The organisations involved and their roles in the crisis management system are outlined in the legislation of Luxembourg (see Chapter 2). Currently, the system is under discussion and most likely will change as new regulations are envisaged¹⁶³².

The main responsibilities and the main organisations involved in the crisis management are outlined in the respective legislation (For more details please refer to Chapter 2). In this Chapter we briefly describe the lines of command and the organisations responsible for certain field of crisis resolution.

The current structure of the crisis management system has been created after the Second World War. The main authority is the Prime Minister. Other players involved are the High Commission for National Protection, the Ministerial Council for National Protection, the Senior Council for National Protection (CSPN), the Crisis Cell and the National Committees, which are created to address a specific field of national protection. The military in general is not involved actively; however their representatives are present in the national committees and CSPN. The military might help with evacuation, for example, after the decision has been made by CSPN.

Once the crisis starts, the Crisis Cell starts functioning and its chairman (which is the Prime Minister) guides it and is assisted in this task by a National Protection Superior Committee (Conseil Supérieur de la Protection Nationale, CSPN), composed by a member delegated from each of the CSPN members. The CSPN also coordinates the work of the 'thematic' national committees, National Committee for Telecommunication (le Comité national des Télécommunications, CONATEL) and National Committee for Civil Aviation Safety (le Comité national de Sûreté de l'Aviation civile, CONATSAC), that are in charge of different functional areas. The composition of the National Committees is presented in Figure 7.

¹⁶³² The organisational chart presented in this report was prepared in October 2014.

National Committee for Telecommunications

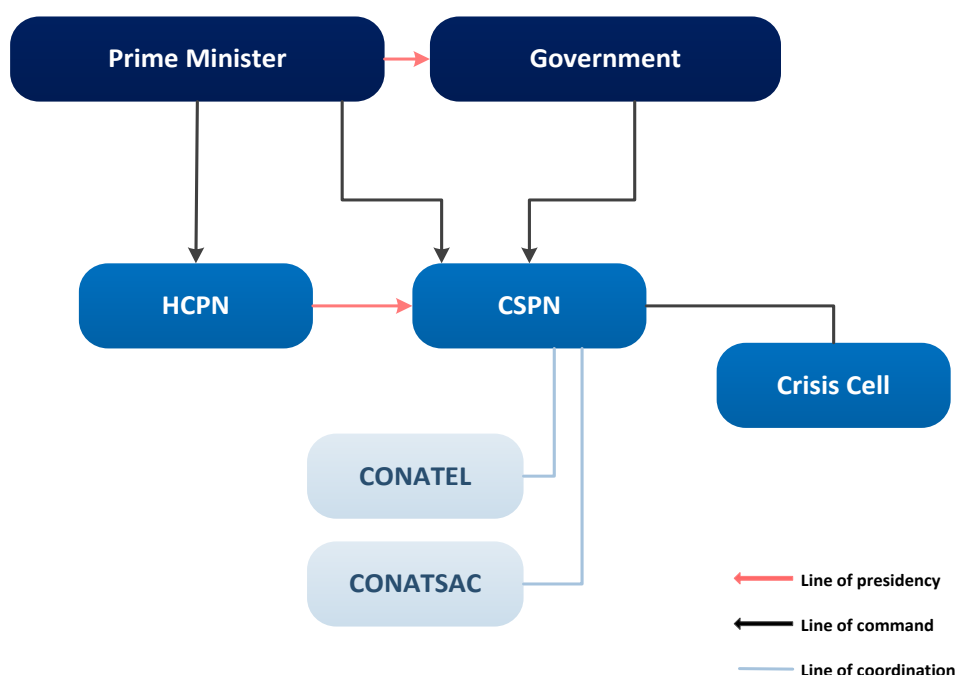
- Ministry of State;
- Communication Centre of the Government;
- Department of Media and Communications;
- Intelligence Service of the State;
- Ministry of Interior;
- Grand Ducal Police;
- The Rescue Service Agency;
- Army;
- Administration of Customs and Excise;
- Centre for Information Technology;
- Division of Radiation Protection of the Ministry of Health;
- Administration of Air Navigation;
- Luxembourg Institute of Regulation.

National Committee for Civil Aviation Safety

- Ministry of State
- Ministry of Interior
- Ministry of Sustainable Development and Infrastructure,
- The Directorate of Civil Aviation
- Administration of Air Navigation,
- The Grand Ducal Police,
- Administration of Customs and Excise,
- Society of Airport Luxembourg SA (lux-Airport).

Figure 39 Composition of the National Committees of Luxembourg¹⁶³³.

The president (Prime Minister) is also assisted by a High Commissioner for National Protection (Haut-Commissaire de la Protection Nationale) assuring the secretarial functions of CSPN and chairing the High-Commissariat for National Protection (Haut-Commissariat de la Protection Nationale, HCPN), a secretarial body. HCPN also ensures the inter-agency communication (both internal and external). The key players involved in the line of command and presidency are presented on the Figure 8.



¹⁶³³ Adapted from the website of the High Commission for National Protection (http://www.hcpn.public.lu/Protection-nationale/Concept_organisation-et-fonctionnement/Cellule-de-crise/index.html).

Figure 40 Diagram of national protection structure of Luxembourg¹⁶³⁴.

The Draft Law (Projet de loi (no. 6475) relative à la Protection nationale) is currently still under discussion. It provides further details and extends the structure of the National Protection as it is actually in place. In particular, it establishes a Crisis Cell. In the event of a large disaster potentially affecting the territory of Luxembourg the Prime Minister activates the crisis cell. Members of the cell are alerted through the HCPN. Under the authority of the Government, the crisis cell initiates, coordinates and monitors the implementation of all measures to cope with the crisis and its effects, respectively, promotes the return to normal. It also prepares the necessary decisions and submits them to the Government for approval. The crisis cell is composed of 12 permanent members and 9 topic related members¹⁶³⁵. It is envisaged that the Crisis Cell will be enlarged in the future.

¹⁶³⁴ Adapted from the website of the Rescue Service Agency (www.112.public.lu).

¹⁶³⁵ For the list of members, see Chapter 1.2.1=2.

The Crisis Cell composition is presented in Figure 9.

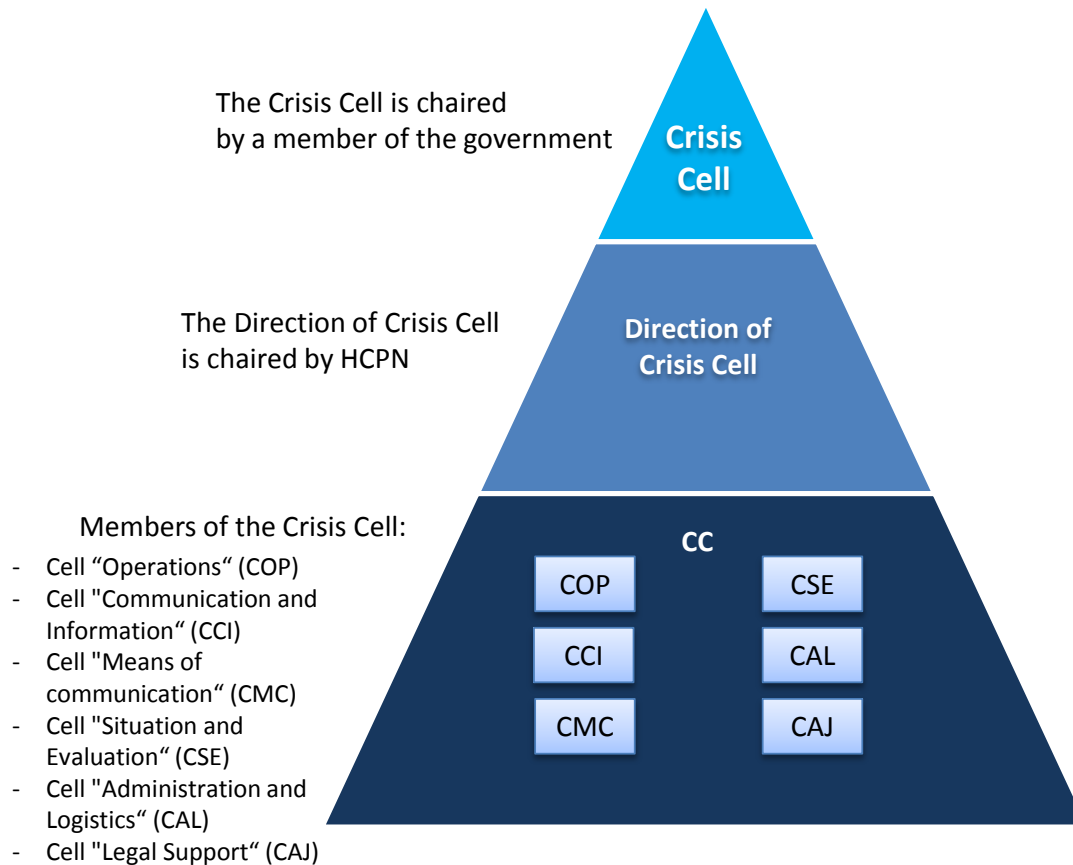


Figure 41 Composition of the Crisis Cell of Luxembourg¹⁶³⁶.

The department of Radiological Protection

In case of a nuclear emergency, the Department of Radiological Protection of the Ministry of Health (this ministry has the executive competence in the field of radiological safety and radiation protection) is also involved in the crisis management. The Department of Radiological Protection exists since its' establishment by the law of 21 November 1980 concerning the organization of the Directorate of Health. The organizational structure is presented in Figure 10.

¹⁶³⁶ Adapted from the website of the High Commission for National Protection (http://www.hcpn.public.lu/Protection-nationale/Concept_-organisation-et-fonctionnement/Cellule-de-crise/index.html).

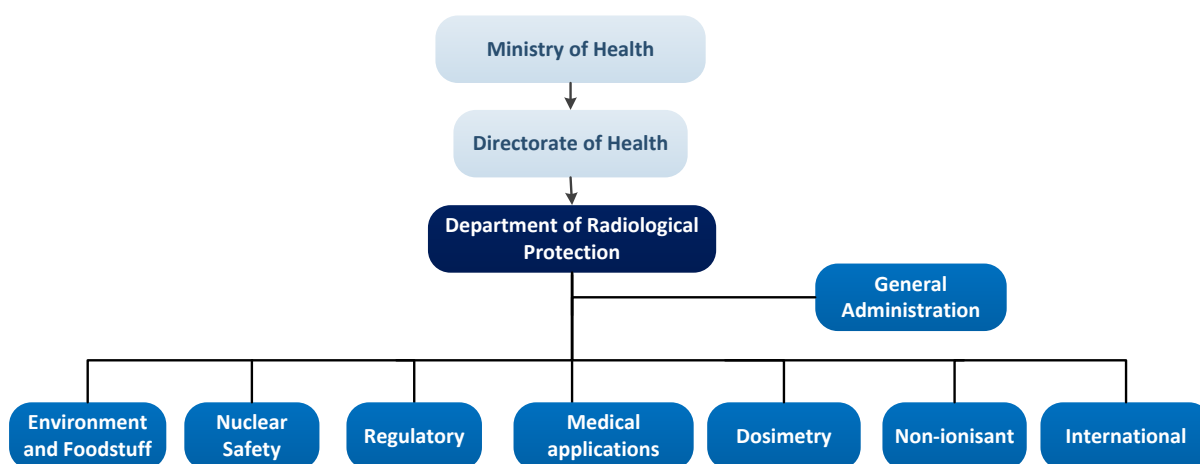


Figure 42 Organisational structure of the Department of Radiological Protection¹⁶³⁷.

The Rescue Service Agency

The Rescue Service Agency (ASS) takes the operational lead and reports to the Minister of Interior. The agency operates the national emergency phone number (112). Currently, the fire brigades are in hands of the municipalities. In case of a large crisis or disaster the ASS is taking over the operational leadership of them. It is envisaged that the new crisis management legislation will incorporate both local fire brigades and the ASS under one governing body. At the moment the organizational structure of the ASS is presented in Figure 5.

The ASS also recruits and trains instructors and volunteers in various fields of protection (for more details please refer to Chapter 5.3). There is an agency that has the mission to promote initiatives in the field of volunteerism, including the establishment and management of the agency in charge of the volunteers (the Agency for Voluntary Services). NGOs and agencies are partners of this agency like Luxembourg Red Cross and National Federation of Firefighters.

3.2 Organisational cooperation

In terms of the legal provision, the cooperation with other Member States of the European Union is regulated by several treaties and agreements. Cross-border assistance to and from Belgium and the Netherlands is facilitated by the means of bilateral agreements. These agreements are based on the Madrid Convention of 1980 offering the regional and local authorities a basis to cooperate with regard to the disaster response. Cross-border cooperation in the Benelux has a legal base in the Benelux Convention on cross-border and inter-territorial cooperation of 1991. The Senningen Memorandum concerning cooperation in the fields of police, justice and immigration was signed June 4th, 1996 in Luxembourg (Senningen) and was re-launched in 2004 with a wider scope

¹⁶³⁷ Adapted from Department of Radiation Protection (2014), National Report on the measures taken by Luxembourg to fulfill the obligations laid down in the "CONVENTION ON NUCLEAR SAFETY" to the Sixth review meeting of the contracting parties in 2014, on behalf of the Government of Luxembourg.

extending it to security, antidrug policies and trans-border cooperation regarding catastrophes and accidents.

Another treaty was concluded between Belgium, Germany, Spain, France, Luxembourg, the Netherlands and Austria in 2005 regarding intensifying cross border collaboration, in particular to fight terrorism, cross border criminality and illegal migration. There is also an international agreement, Memorandum of Understanding on cooperation in the field of crisis management that may have transboundary effects between Belgium, the Netherlands and Luxembourg, signed in Luxembourg on 1 June 2006¹⁶³⁸.

The High Commission for National Protection (HCPN) acts as a national representative of Luxembourg in the international fora (European Union, NATO and other international organisations that deal with crisis management) in terms of coordination. The HCPN is also responsible for establishment and maintenance of the contact with the similar organisations in other countries.

HCPN participates in various working groups as it is also a national contact point in the field of the protection of critical infrastructure. This includes among other things being a contact point for European Programme for Critical Infrastructure Protection driven the European Commission¹⁶³⁹. Thus HCPN contributes to the implementation and formulation of strategies.

The Rescue Service Agency has an intervention group for humanitarian missions that are conducted outside the territory of Luxembourg. This group might be involved in resolution of large crises and disasters at a request of the country or countries concerned or as part of the international assistance. Interventions outside the territory of Luxembourg are decided by the Minister of Interior.

In case of an international crisis, it is possible that firstly the national contact points are informed about the crisis. It could be a contact point that the Rescue Service Agency is in charge of. The national contact point informs the organisation in charge which in turn informs the Prime Minister. The Prime Minister then decides to formulate the Crisis Cell. Then the mechanism described in previous chapters starts functioning.

In case of a simultaneous occurrence of disasters and emergencies, the Crisis Cell will decide on the priorities and main responsibilities to handle crises. There are no prescribed instructions in case of such events thus the decision is taken case-by-case.

¹⁶³⁸ Loi du 16 décembre 2011 portant approbation du Mémorandum d'accord concernant la coopération dans le domaine de la gestion des crises pouvant avoir des conséquences transfrontalières entre le Royaume de Belgique, le Royaume des Pays-Bas et le Grand-Duché de Luxembourg, signé à Luxembourg, le 1er juin 2006. Available at www.legilux.public.lu/leg/a/archives/2011/0263/a263.pdf.

¹⁶³⁹ Directive 2008/114 / EC of 8 December 2008 on the identification and designation of European Critical Infrastructure and the assessment of the need to improve their protection.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Currently there are no formal standing operation procedures for civil protection. At present the legislative set up of the crisis management system is under revision and new laws are envisaged to come into force, therefore it is possible that the SOPs and guidelines will be established as well.

Currently there exist rules on the internal functioning of the CSPN which are only available to the members of the CSPN. Departments and agencies responsible for certain area of disasters also participate in national and international exercises, that later on might be applied in the field. With regard to the nuclear safety for example Luxembourg has established mechanisms with the neighbouring countries that allow the exchange of information on a regular routine basis. Also the adopted plans (for more details please refer to Chapter 1.2.5 and Chapter 2) and the respective legislation have detailed instructions for the organisations involved in crisis management.

4.2 Operations planning

The policy of Luxembourg with regard to crisis management is mainly case-by-case based; therefore the plans are being formulated when a disaster is identified. Nevertheless, there are several plans already adopted by the Government of Luxembourg. At the moment this report was under preparation, there were four plans elaborated and communicated to the population: the “Influenza Pandemic” Plan, the Ebola emergency intervention plan, Emergency Response Plan in case of a nuclear accident in Cattenom, Plan ‘Cyber’. Below briefly we present the description of those plans.

The “Influenza Pandemic” Plan¹⁶⁴⁰

This plan was adopted by the Governing Council of 21 July 2006¹⁶⁴¹, which serves as a basis for the preparation and management conduct of an influenza pandemic. The government plan describes more specifically the government's response to the risk of pandemic influenza, including avian influenza in animals and humans.

The plan contains a catalogue of 187 measures applicable before, during and after an influenza pandemic. These measures reflect the six phases set by the World Health Organization (WHO) as part of the evolution of a pandemic. They cover the whole of the organization and functioning of the company in the socio-economic health plan, social, transport, security, international relations, etc.

¹⁶⁴⁰ Adapted from <http://www.infocrise.public.lu/fr/grippe-pandemie/index.html>

¹⁶⁴¹ Legislation is available here <http://www.gouvernement.lu/708654/21conseil>.

The Ebola emergency intervention plan

Published by the Government of Luxembourg in October 2014¹⁶⁴², this plan aims to set up the structure for the response to an eventual Ebola epidemic in Luxembourg. It has been elaborated by the HCPN and determines the bodies in charge of managing the crisis, the different possible scenarios, the emergency measures to be taken and the procedures to be followed.

In case the plan is started, the Crisis Cell (Cellule de Crise) is activated by the Prime Minister and starts monitoring the different actions in response to the crisis. The CC is composed by members from the ministries of health, of foreign affairs, of home affairs and of infrastructures backed by representatives from the Army, the Police, the ASS and the Administration of Duties and Excises.

The plan identifies four main scenarios entailing a likely/confirmed case of Ebola:

- a. landing in Luxembourg,
- b. detected in Luxembourg (elsewhere than the airport),
- c. who is a Luxembourgish national/resident that must be brought back to Luxembourg,
- d. detected on a Luxembourgish ship.

In all of the abovementioned situations, the structure in charge of the hospitalisation is the CHL (Centre Hospitalier de Luxembourg) or, in the hospitals of Dusseldorf, Strasburg and Nancy.

The published plan does not detail all the measures and the schedules prepared for the abovementioned scenarios.

Emergency Response Plan in case of a nuclear accident in Cattenom¹⁶⁴³

The new Emergency Response Plan (ERP) in case of nuclear accident or incident has been adopted and made enforceable by the Governing Council in October 2014.

The ERP includes four key measures of prevention and protection of the population: the sheltering, the absorption of potassium iodide tablets, evacuation and food restrictions. It also distinguishes different phases of the accident, the emergency phase and the post-accident phase which are based on International Nuclear Events Scale (INES). To facilitate the implementation of the plan the country is divided into two areas. The first area is within a radius of 15 km from Cattenom – people living in this area are going to be evacuated in case of an accident in Cattenom. Most of the measures concern this area and if necessary it is extended further to 25 km. In case the accident is rather severe, the rest of the country is also alerted and measures are taking place for the whole country. In case of an incident, a Crisis Cell (Cellule de Crise) will be activated at the national level by the Prime Minister or his delegate. A Cell of radiological assessment (Cellule d'évaluation radiologique) can be activated as well and it will be composed of experts from the Radiation Protection Division of the Department of Health and members of the Rescue Services Agency (ASS).

Plan 'Cyber'¹⁶⁴⁴

In case of an information attack the 'Cyber' plan is adopted since March 2014. This plan has been updated as part of the implementation of the national strategy on cyber security. It defines the

¹⁶⁴² Adapted from: "Plan d'intervention d'urgence - Cas probables / confirmés EBOLA au niveau national ("Plan EBOLA")".

¹⁶⁴³ 'Plan d'intervention d'urgence (PIU) en cas d'accident nucléaire'.

¹⁶⁴⁴ The information was assessed from: http://www.hcpn.public.lu/plans_nationaux/Plan-_Cyber_/index.html.

action of the government in the event of large-scale attack against information systems in the public and / or private sector, which may cause a major malfunction or unavailability of these systems, which threatens the interests vital or essential needs of all or part of the country or the population of Luxembourg. Routine incidents are managed by the CERT (Computer Emergency Response Team).

4.3 Logistics support in crises

During the crisis the Rescue Service Agency provides the transportation (mainly ambulances and fire brigades if the crisis is rather large). Usually military and private logistics providers are not involved in crisis resolution. The decision of their involvement is made by the Supreme Council for National Protection. Article 8 in the Law of 8 December 1981 on requisitions in armed conflict, serious international crisis or disaster states that any person or entity, whether Luxembourgish or foreigner, residing in the Grand Duchy of Luxembourg, may be required to execute tasks of public interest. Therefore it is possible that the private logistics providers will have to be involved in crisis resolution.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

As soon as a crisis is identified and the relevant organisation comes in force, the information is also transferred to the public. Depending on the disaster and crisis, the information is delivered by the competent ministry or agency involved in the response to the crisis. For example, if the crisis concerns the health policy, the Ministry of Health will take the lead in informing the public. Generally, the Information and Press Agency (Service Information et Presse du gouvernement luxembourgeois, SIP) of the Ministry of State (Présidence du Gouvernement, Ministère d'État) is coordinating the information contents and the information flow.¹⁶⁴⁵

While the external communication lies with the Information and Press Agency, the inter-agency and inter-ministry communication is ensured by the High Commissioner for National Protection. For all the parties that are involved in crisis management in Luxembourg, the exchange of the information occurs via so-called 'Log files' which are transferred to the Crisis Cell. This way it is ensured that the flow of information is continuous keeping the involved parties updated with all the decisions made as well as the bodies that made it.

The information to the public is transferred through the official government website dedicated to crisis communication, www.infocrise.lu, which came to live in October 2014. The main rationale to create such a website was to increase the awareness of the action and conduct to adopt as well as of the protective measures taken by the authorities thus making the crisis easier to manage. This website provides the most up-to-date information on the status of the crisis as well as the brochures that inform and prepare the



¹⁶⁴⁵ This information is obtained via the expert interviews.

population for a certain disaster. All government emergency plans, the information related to national authorities with emergency situations¹⁶⁴⁶ are also available on this site.

¹⁶⁴⁶ At the moment this report was under prepared there were emergency response in case of a nuclear accident or incident, pandemics and Ebola presented on the website (see Chapter 4.2).

5 Capabilities

5.1 Human resources

The Department of Radiological Protection which is under authority of the Ministry of Health is composed of 14 people. Following the nuclear accident in Fukushima, the department has increased the number of staff. HCPN is comprised of 11 employees¹⁶⁴⁷.

The Rescue Service Agency consists of 94 permanent employees. The Agency is also responsible for training volunteers. In 2013 the pool of volunteers consisted of 8.184 active people from civil protection and fire brigades. The number of volunteers differs per division/department of the ASS.

According to information provided by the National Federation of Firefighters (la Fédération Nationale des Corps de Sapeurs-Pompiers, FNSP), the fire department was comprised of 8.123 volunteers (including young firefighters and non active members) spread across 148 municipal bodies in 2013¹⁶⁴⁸.

With regard to other organisations, there is no permanent disaster management staff available. Since some organisations are formed when a crisis occurs, people that also get involved in those organisations do have other tasks as well, which they carry out in time of no crisis or disaster. For some of the actors involved the tasks they carry out during a crisis are similar to their regular work like firefighters.

5.2 Materiel (non-financial) resources

Since most of the organisations that are involved in crisis management have also other responsibilities or are involved in responding to local crises, their equipment is not only used in case of large disasters, but also during the daily execution of their tasks. Thus the fire brigade has in its possession the fire trucks and ambulance services have ambulance cars, stretchers and medicines. The Rescue Service Agency also has medicines necessary to be protected from nuclear release. According to the expert interviews, it is expected that there is going to be a national crisis centre build which will be specifically dedicated to the crisis management.

In general, the military is not involved in the crisis response (due to the fact that the number of disasters and crises in Luxembourg is rather limited), however they might be involved. The CSPN decides upon the contribution. Therefore it is possible that military assets might be involved in crisis resolution.

¹⁶⁴⁷ This information is obtained via the expert interviews. According to them, the staff of the HCPN will be enlarged in the near future.

¹⁶⁴⁸ Ministère de l'Intérieur (2013), Rapport d'activité 2013.

5.3 Training

In Luxembourg trainings are organised for volunteers, for trainers and for the staff involved in the crisis management. Besides this nationally available exercises, Luxembourg largely participates in the international exercises as well.

Trainings

There are two schools in Luxembourg that provide trainings for volunteers which are managed by the Rescue Service Agency: the National School of Civil Protection (l'Ecole Nationale de la Protection Civile, ENPC) and the National School for Fire and Rescue Services (l'Ecole Nationale du Service d'Incendie et de Sauvetage, ENSIS). The latter provides trainings for firefighters which is located in Niederfeulen. These training are given by foreign specialists as well. The National School of Civil Protection (l'Ecole Nationale de la Protection Civile, ENPC) exists since 1962 and provides courses in various centres across the country. There are courses that focus on basis skills essential for effective emergency services and courses with heavy equipment). The courses cover all the areas of civil protection (first aid, rescue services, nuclear, biological and chemical incidents and accidents). Trainings of paramedics are also held at ENPC.

The ASS also trains the trainers that themselves are able to give trainings to businesses and volunteers also at ENPC and ENSIS. The trainings are also offered to the workers of the relief centres.

Exercises: national and international

Given the fact that Luxembourg is not exposed to many risks and the number of disaster in the past years was rather limited, Luxembourg focuses its efforts on participating in international exercises. *'Such simulations of emergency situations have the advantage to face a higher degree of complexity and are thus more realistic'*¹⁶⁴⁹. The international exercises are also used in practice afterwards and allow a mutual learning effect at all levels of participation.

With regard to nuclear incidents and accidents, the Rescue Service Agency together with the Department of Radiological Protection regularly organises national exercises or they participate in international exercises. For the past twenty years, they have organised twice per year small-scale national exercises in order to train the specialized intervention teams¹⁶⁵⁰. Focused on a nuclear emergency at the Cattenom nuclear plant, the exercises are organized every three years between Germany (two German federal States: Sarreland and Rhineland-Palatinate), Luxembourg and France.

¹⁶⁴⁹ Department of Radiation Protection (2014), National Report on the measures taken by Luxembourg to fulfill the obligations laid down in the "CONVENTION ON NUCLEAR SAFETY" to the Sixth review meeting of the contracting parties in 2014, on behalf of the Government of Luxembourg.

¹⁶⁵⁰ Department of Radiation Protection (2014), National Report on the measures taken by Luxembourg to fulfill the obligations laid down in the "CONVENTION ON NUCLEAR SAFETY" to the Sixth review meeting of the contracting parties in 2014, on behalf of the Government of Luxembourg.

Luxembourg has participated in INEX exercises¹⁶⁵¹, organized by the NEA of the OECD, CONVEX exercises¹⁶⁵² launched by the AIEA, as well as in INEX¹⁶⁵³.

The staff of the Rescue Service Agency regularly participates in international exercises. For example, in 2013 they partook in TRIPLEX 2013, OPEX Bravo, SIMEX “Count Down”, ARF DIREX 2013, Cold Conditions Exercise, BelModex (Modex1)¹⁶⁵⁴, Exercise OSOCC/RDC¹⁶⁵⁵.

5.4 Procurement

5.4.1 Procurement regulation

European regulations

The procurement of public contracts needs to be in line with the principles of European treaties and especially with the free movement of goods services, capital and people. Furthermore the procurement needs to comply with the principles of equality, proportionality etc. For some types of procurement additional regulations are codified in directives. Within the European legislation, three different procurement directives apply. These directives are mutually exclusive meaning only one of the directives apply to the public procurement. Directive 2014/25/EU (on procurement of utilities) and Directive 2009/81/EC (on procurement in the defence and security industry) are topic specific. If these specific directives do not apply, Public Sector Directive 2014/24/EU is applicable, which is the replacement of Directive 2004/18/EC. The aim of the new Directive is to simplify the rules on public procurement; improve the participation of SMEs and stimulate cross border joint procurement.

Stimulation of cross border joint procurement is helpful in case of a major internal crisis or a cross border crisis. The Directive states in the preamble that contracting authorities should be able to choose to jointly provide their public services in cooperation with other authorities, without being obliged to use any legal form. These services don't have to be identical. The cooperation does not require all participating authorities to fulfil the obligations of the contract, as long as there is a commitment to contribute to the cooperative performance. The preamble points out that there are difficulties in cross border joint procurement. Therefore new rules have to be made. In these rules, the conditions for cross border procurement have to be clarified, as well as the applicable regulations. In addition, contracting authorities should be able to set up joint entities established under national or EU law. The new rules are specified in article 39 of the regulations.

If the procurement is executed by a centralised purchasing body located in another MS, the procurement shall be conducted in accordance with the national regulations of the MS where the purchasing body is located. In addition, several contracting authorities from different MS may jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system. Participating contracting authorities will then conclude an agreement that determines all

¹⁶⁵¹ <https://www.oecd-neo.org/rp/inex/>.

¹⁶⁵² <http://www-ns.iaea.org/downloads/iec/convex-3.pdf>.

¹⁶⁵³ <https://www.oecd-neo.org/rp/inex/>.

¹⁶⁵⁴ <http://www.securitecivile.be/en/content/european-civil-protection-modules-exercises>.

¹⁶⁵⁵ <http://www.insarag.org/en/global-structures/news-archive-global/211-osocc-course-in-uae-was-conducted.html>.

responsibilities of the parties and the internal organisation of the procedure. As said before, the contracting authorities can set up a joint entity. The parties shall decide on the applicable rules on procurement. They can choose the rules of the MS where the entity has its registered office or where the entity carries out its activities.

This project evolves around the procurement related to crisis management, for example the procurement of ambulances, emergency packs or trainings. The Utilities Directive applies to gas and heat, electricity, water, transport services, ports and airports and postal services (article 8-13). The Directive on defence and security applies to supply of military equipment and sensitive supplies. The majority of procurement in crisis management will be procured by normal NCCs and local authorities like the fire department or police and will not be secret. So in most cases the Public Sector Directive (2014/24/EU) is applicable. This chapter will therefore focus on this directive. Other directives can also be applicable, for example if the army is used to solve a major crisis. The directive is addressed to Member States and has no direct effect on the national regulations. The directive needs to be implemented first.

Scope of the Public Sector Directive

The Public sector directive applies to procurement by contracting authorities with respect to public contracts as well as design contests whose value is estimated to be not less than (article 4):

- € 5.186.000 for public works contracts;
- € 134.000 for public supply and service contracts and design contests, awarded by central government;
- € 207.000 for public supply and service contracts or design contests awarded by sub-central contracting authorities.
- € 750.000 for public service contracts for social and other specific services listed in Annex XIV.

This directive should not apply to certain emergency services where they are performed by non-profit organisations or associations, since the particular nature of those organisations would be difficult to preserve if the service providers had to be chosen in accordance with the procedures of the directive. Furthermore the directive does not apply to public contracts with the purpose of providing public communication networks or electronic communication services; public contracts organised pursuant to international rules; several types of service contracts, e.g. rental, legal services and employment contracts and service contracts based on exclusive rights; and last, public contracts between entities within the public sector (articles 8-12).

Award procedures

On a European level, procurement is executed by the European Commission. The public sector directive contains several award procedures:

- open procedure,
- restricted procedure,
- competitive procedure with negotiation,

- competitive dialogue,
- negotiated procedure without prior publication.

The *open procedure* applies when no other procedure is chosen. In the open procedure, the contracting authority submits a call for tenders. Interested companies may submit a tender. The best offer is chosen, based on the selected award criteria (article 27).

The *restricted procedure* consist of two phases. In the first phase a call for expression of interests is set out. Interest candidates may submit an invitation to tender. The contracting authority will then invite the most suitable candidates to submit a tender. The contracting authority will award the contract to the best tender, based on the selected award criteria (article 28).

In the *competitive procedure* with negotiation any interested candidate may submit a request to participate in the negotiations, in response to a call for competition. In this call for competition, the contracting authority has provided a description of their needs and the characteristics of the works or services to be procured. Only the interested candidates that are invited may submit an initial tender, which will be the basis of the negotiations (article 29). In several cases the negotiation procedure can be used without prior publication, for example when the public contract contains a creative achievement; when there is no competition; when intellectual property rights need to be protected, or when there are reasons for extreme urgency (article 32).

In the *competitive dialogue* any interested candidate can submit a request to participate in response to a contract notice given by the contracting authority. The contract notice provides the information on and the needs and requirements of the contracting authority, as well as the chosen award criteria. The selected interested candidates will join the competitive dialogue, in which the means best suited for satisfying the contract will be defined (article 30).

A new procedure within this directive is the *innovation partnership*. In this procedure, any economic operator may submit a request to participate in response to a contract notice, by providing information for qualitative selection that is requested by the contracting authority. The innovation partnership can be set up with one partner or several partners. Only the economic operators invited by the contracting authority participate in the procedure. After each phase, the contracting authority may decide after each phase to terminate the partnership or reduce the number of partners within the partnership, based on the targets.

According to article 26, the open procedure and restricted procedure are the standard procedures to apply in case of procurement. The other procedures can be used in a limited number of situations, for example when the service is innovative, or when the technical specifications can't be determined (art. 26, sub 4.).

Contracting authorities can use framework agreements, provided that they apply the procedures in this directive. The agreement can not exceed four years. Contracts within the agreement will be awarded according to the rules in article 33.

In most procedures the candidates are chosen with the use of selection criteria. The selection criteria may relate to suitability to pursue the professional activity; economic and financial standing and technical and professional ability. All criteria need to be related and proportionate to the matter of the contract (article 58).

National regulations

Luxembourg still has to implement the public sector directive 2014/24/EU abrogating directive 2004/18/CE. In the Report on the transposition of European Directives and Application of EU Law 16 May 2014 (Rapport sur la Transposition des Directives Europeennes et L'application du Droit de l'Union), the Ministry of Sustainable Development and Infrastructure (Ministère du Développement durable et des Infrastructures (Travaux publics) warns that the transposition of this directive in the national law will engender deep changes in the present legislative framework due to extensive modification in or abrogation of the present law on Public Procurement, the Act of 25 June 2009 on public procurement (Loi du 25 juin 2009 sur les marchés publics). The Ministry also states that the process of transposition will need to take into account all the considerations made by the entities concerned (other ministries as well as the professional organisations (Chambres Professionnelles)).

5.4.1.1 Scope

Therefore, for the time being, the regulatory framework for the procurement procedures in the public sector is the Act of 25 June 2009 on public procurement. This law is structured in three parts (Livres), the last two of which are the transposition in the national law of the previous European directives on procurement (2004/18/CE and 2004/17/CE respectively).

The first part (Livre I) addresses the national specificities in terms of procurement. It starts by stating that “without prejudice to specific provisions of sections II and III, the provisions of this section apply to all contracts awarded by public contracting authorities”, so that at present the provisions do not fully comply with the present European legal framework.

The scope of the national legislation is defined as all those contracts awarded by public contracting authorities that are not reaching the thresholds for the amounts to be contracted that are specified by the European directives¹⁶⁵⁶.

The law is applied under the specifications of the Grand Ducal Regulation of 3 August 2009 implementing the Law of 25 June 2009 on public procurement and amending the threshold provided for in Article 106 point 10 of the amended municipal law of 13 December 1988 (Règlement grand-ducal du 3 août 2009 portant exécution de la loi du 25 juin 2009 sur les marchés publics et portant modification du seuil prévu à l'article 106 point 10° de la loi communale modifiée du 13 décembre 1988).

¹⁶⁵⁶ Retrieved from the Portail des marchés publics du Luxembourg
(<http://www.marches.public.lu/fr/principes-generaux/structuration/index.html>).

5.4.2 Procurement procedures

The law

Before describing the typologies of procurement procedure, art. 4 states that the contracting authorities (*pouvoirs adjudicateurs*) shall apply the principles of equality, non discrimination and transparency. Also, they shall take into consideration the environmental and sustainability issues that may arise, in line with what is stated in each contract specification (*cahier des charges*). Finally, in case of electronic procedure, further and specific modalities are explained in the a regulation.

As for the possible procedures, the law lists three typologies, the “open procedure”, the “restricted procedure” (with or without a tender notice) and the “negotiated procedure”, the first one being the norm and the others the exception.

The exceptions are determined by thresholds concerning the contracted amounts, the nature of the works or services to be contracted and of the contracted authority, as under art. 7-8.

For what Crisis Management is concerned, albeit there is no direct mention of it, under art.8 the negotiated procedure is made possible when the contracting authority is the Army, the Police, the Customs and Excise Administration or the Rescue Services (the terms used are the vague “services de secours”), in case of requirements for the standardization of the equipment and intervention material or of personal belongings necessary for the safety and protection of the members of the intervention unit.

The regulation

The regulation applies to all the Public Procurement Procedures and the contracting authorities listed in Section I of the Act of 25 June 2009 on public procurement. This regulation abides by the principles stated in the European directives 2004/18/EC and 2004/17/EC, thus it will have to be modified or abrogated according to the transposition and implementation procedure

5.4.2.1 Selection criteria

The law

Art. 11 of the Act of 25 June 2009 on public procurement lists the selection criteria to be used in case of Public Procurement Procedure. Those can be either the principle of the most economically advantageous regular offer or the regular offer at the lesser price, where a regular offer is every offer that after evaluation is deemed formally and technically compliant and that fulfils all of the qualitative selection criteria that may be listed in the terms of reference (*cahiers spéciaux des charges* – see below).

The article also lists the requirements that are to be used to evaluate if a proposal is or not economically advantageous. The contracting authority may decide to use one or more of the listed criteria.

Art. 18 lists the only exception to the aforementioned selection criteria in case of Public Procurement carried out by municipalities or analogous authorities. In detail, “notwithstanding the provisions of Article 11, the Board of Mayor and Aldermen or the body entitled to engage for the public institution placed under the supervision of the municipality may, where the total amount excluding the VAT does not exceed 20.000 euros (...) award the contract to a competitor residing in the municipality,

provided that the price offered by the local competitor does not exceed by more than five percent the one of the economically most advantageous regular offer or that of regular offer at the lesser price”.

The regulation

As for the specifications, these are stemming from the regulation Grand Ducal Regulation of 24 March 2014 on the establishment of special sections of standardized charges for public procurement and the amendment of Article 103 of the Grand Ducal Regulation of 3 August 2009 implementing the Law of 25 June 2009 on the public markets (Règlement grand-ducal du 24 mars 2014 portant institution de cahiers spéciaux des charges standardisés en matière de marchés publics et portant modification de l'article 103 du règlement grand-ducal du 3 août 2009 portant exécution de la loi du 25 juin 2009 sur les marchés publics) that details the requirements to insert in all the terms of reference for the different possible procurement objects.

5.5 Niche capabilities

The niche capabilities are those in which a Member States or an associated country specialises and it is ready to provide them to other countries in case of a crisis or a disaster, while other countries recognise their quality and are or may be willing to use them. With regard to that, in the beginning of 2014 the revised legislation on the Civil Protection Mechanism of the European Union has come into force¹⁶⁵⁷. As a result a European Emergency Response Capacity (EERC) has been set up, moving from the previous ad hoc arrangement to a more predictable and reliable system that allows for better planning and coordination. It takes the form of a voluntary pool of pre-committed response assets from the Member States. Therefore the European Union is aware of the niche capabilities of the Member States and can make use of those capacities as well as experts that are available for immediate deployment. This capacity will be covered with regard to “costs of obligatory training courses, exercises and workshops necessary for the certification of Member States' response capacities for the purposes of the EERC ("certification costs"). The certification costs may consist of unit costs or lump sums determined per type of capacity, covering up to 100 % of the eligible costs”¹⁶⁵⁸. Among the niche capabilities, the government of Luxembourg has mentioned in the voluntary pool Technical Assistance Support Team (together with International Humanitarian Partnership), Search and Rescue team's, water purification unit and wild water rescue unit and MEDEVAC (transport ambulances and repatriation by air).

The MEDEVAC unit of Luxembourg has been incorporated into the European Civil Protection Mechanism since 2012. The MEDEVAC unit ensures the repatriation of patients and stakeholders involved in aid missions in countries affected by Ebola. Before MEDEVAC can be deployed, the Luxembourg Air Rescue (LAR) will perform a risk analysis.

¹⁶⁵⁷ The decision has been taken in the end of 2013 regarding the new Civil Protection Mechanism in the EU (Decision of the European Parliament and of the Council, 9 December 2013, PE-CONS 97/13).

¹⁶⁵⁸ Decision of the European Parliament and of the Council, 9 December 2013, PE-CONS 97/13, p.54.

The MEDEVAC module will be available as long as the Grand Duchy of Luxembourg may reserve the right to refuse to accept an assignment to deploy the module in specific cases and after consultation with the European Commission:

- If a national emergency when the Luxembourg should repatriate a person, resident or border infected by Ebola, a collaborator of NGOs under contract with the Department of Cooperation and Humanitarian Action;
- in cases of force majeure such as technical problems of the plane, unstable weather conditions, etc.;
- in case of any serious situation, especially when the risk analysis on a case by case basis by the LAR would prove detrimental to an evacuation¹⁶⁵⁹.

On 27 November 2014 Luxembourg also held a large-scale exercise for all the stakeholders that will intervene in case of an Ebola alert. The exercise was held by the High Commission for National Protection, the Rescue Service Agency, the Health Directorate, the Government Information and Press Service, the Ville de Luxembourg Fire and Ambulance Service, the Luxembourg Hospital Centre, as well as Luxair and Lux-Airport.



Figure 43 Ebola Emergency Simulation Exercise¹⁶⁶⁰

Among other capabilities, it is worth mentioning the integrated platform, emergency.lu. It includes applications, end devices and communication technologies and consists of satellite infrastructure and capacity; communication and coordination services; satellite ground terminals for long term as well as rapid deployment; and transportation of equipment to the disaster area within the first 12 to 20 hours. The main supporters of the platform are the World Food Programme, the Emergency Telecommunication Cluster and the Rescue Service Administration.

¹⁶⁵⁹ Information is adopted from the website (<http://www.infocrise.public.lu/fr/actualites/ebola/2014/11/20141106-ebola-cp/index.html>).

¹⁶⁶⁰ Source: SIP, Government of Luxembourg

Resources

Legislative acts

- Directive 2014/24/EU of the European Parliament and of the council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.
- Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.
- Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC.
- Directive 2008/114/CE du Conseil du 8 décembre 2008 concernant le recensement et la désignation des infrastructures critiques européennes ainsi que l'évaluation de la nécessité d'améliorer leur protection.
- Loi du 12 juin 2004 portant création d'une Administration des services de secours.
- Projet de loi (no. 6475) relative à la Protection nationale.
- Loi du 16 décembre 2011 portant approbation du Mémorandum d'accord concernant la coopération dans le domaine de la gestion de crises pouvant avoir des conséquences transfrontalières entre le Royaume de Belgique, le Royaume des Pays-Bas et le Grand-Duché de Luxembourg, signé à Luxembourg, le 1er juin 2006.
- Loi modifiée du 30 mai 2005 relative aux dispositions spécifiques de protection de la personne à l'égard du traitement des données à caractère personnel dans le secteur des communications électroniques et; portant modification des articles 88-2 et 88-4 du Code d'instruction criminelle.
- Loi du 2 août 2002 relative à la protection des personnes à l'égard du traitement des données à caractère personnel.
- Loi du 8 décembre 1981 sur les réquisitions en cas de conflit armé, de crise internationale grave ou de catastrophe
- Titre V de la loi du 31 mai 1999 portant création d'un corps de police grand-ducale et d'une inspection générale de la police
- Loi communale modifiée du 13 décembre 1988
- Texte coordonné de la loi communale du 13 décembre 1988 (art.100-102).
- Loi du 27 février 1986 concernant l'aide médicale urgente.
- Loi du 1er mars 2013 portant modification
 - de la loi modifiée du 31 juillet 2006 portant introduction d'un Code du Travail;
 - de la loi modifiée du 12 juin 2004 portant création d'une Administration des services de secours.
- Loi modifiée du 18 novembre 1976 portant organisation de la protection civile.
- Règlement grand-ducal du 25 octobre 1963 concernant l'organisation générale de la protection nationale.

- Arrêté grand-ducal du 31 décembre 1959 concernant l'organisation générale de la protection nationale.
- Loi du 22 août 1936, autorisant le Gouvernement à prendre les mesures propres à protéger la population contre les dangers résultant d'un conflit armé international et notamment des dangers dus aux attaques aériennes.

Other normative acts

- Règlement grand-ducal du 12 mars 2012 portant application de la directive 2008/114/CE du Conseil du 8 décembre 2008 concernant le recensement et la désignation des infrastructures critiques européennes ainsi que l'évaluation de la nécessité d'améliorer leur protection.
- Règlement grand-ducal du 21 mars 2012 déterminant les modalités de permanence et de garde et d'indemnisation des volontaires des unités de secours de la division de la protection civile de l'Administration des services de secours.
- Règlement grand-ducal du 1er juillet 2011 modifiant
 - l'arrêté grand-ducal modifié du 23 novembre 1955 portant règlement de la circulation sur toutes les voies publiques.
 - l'arrêté grand-ducal du 6 mai 2010 portant organisation
 - de la division d'incendie et de sauvetage de l'Administration des services de secours,
 - des services d'incendie et de sauvetage des communes.
- Règlement grand-ducal du 6 mai 2010 déterminant les missions spécifiques, la composition, l'organisation et le fonctionnement de la division de la protection civile de l'Administration des services de secours.
- Règlement grand-ducal du 6 mai 2010 portant organisation
 - de la division d'incendie et de sauvetage de l'Administration des services de secours,
 - des services d'incendie et de sauvetage des communes.
- Règlement grand-ducal du 6 mai 2010 fixant
 - l'organisation de la formation des agents des services de secours et de la population,
 - la composition, l'organisation et les missions de la Commission à la formation de l'Administration des services de secours.
- Règlement grand-ducal du 6 mai 2010 fixant les modalités du congé spécial des volontaires des services de secours.
- Règlement grand-ducal du 6 mai 2010 portant organisation du contrôle médical des agents des services de secours.
- Règlement grand-ducal du 6 mai 2010 fixant
 - l'organisation, le fonctionnement et les modalités de nomination et d'indemnisation des membres du Conseil supérieur des services de secours,
 - les indemnités revenant aux conseillers techniques de l'Administration des services de secours.
- Règlement grand-ducal du 14 décembre 2000 concernant la protection de la population contre les dangers résultant des rayonnements ionisants.
- Règlement grand-ducal du 11 août 1996 concernant l'information de la population sur les mesures de protection sanitaire applicables et sur le comportement à adopter en cas d'urgence radiologique.

- Arrêté grand-ducal du 4 décembre 1987 portant institution de la médaille de Mérite de la Protection Civile.
- Règlement grand-ducal du 13 octobre 1983 portant extension de l'assurance obligatoire contre les accidents aux activités de secours et de sauvetage.
- Règlement grand-ducal du 19 mars 1979 instituant près du lac de barrage d'Esch-sur-Sûre un poste de premiers secours qui fonctionne pendant la saison touristique allant du 15 mai au 15 septembre.
- Arrêté grand-ducal du 23 juillet 1945 concernant le recouvrement des impôts "Versicherungssteuer" "Feuerschutzsteuer" et "Beförderungssteuer" (6 Ko).
- Arrêté Grand-Ducal du 31 janvier 1907 concernant l'exécution de la loi du 22 avril 1905 sur l'établissement d'un impôt spécial dans l'intérêt du service d'incendie (50 Ko).
- Règlement grand-ducal du 24 mars 2014 portant institution de cahiers spéciaux des charges standardisés en matière de marchés publics et portant modification de l'article 103 du règlement grand-ducal du 3 août 2009 portant exécution de la loi du 25 juin 2009 sur les marchés publics.

Official documents (white papers, strategies, etc.)

- Rapport sur la Transposition des Directives Europeennes et L'application du Droit de l'Union

Online resources (e.g. websites of key CM organizations)

- http://ec.europa.eu/echo/files/civil_protection/vademecum/lu/2-lu.html
- www.hcpn.public.lu
- www.chd.lu
- www.gouvernement.lu
- www.112.public.lu
- www.infocrise.public.lu
- <http://www.ms.public.lu/fr/index.html>
- www.emergency.lu
- www.legilux.public.lu
- www.marches.lu
- www.etat.lu

Publications

- Alliance Developments Work (2014), 'World risk report 2014'
- Ministère de l'Intérieur (2013), Rapport d'activité 2013.
- Information and Press Service of the Luxembourg Government (2014), 'What to do in the event of a nuclear alert?'. Available at: www.infocrise.public.lu/fr/publications/urgence-nucleaire/brochure-cattenom/201410-brochure-cattenom-eng.pdf

Expert interviews

- the Rescue Service Agency (Administration des services de secours, ASS),
 - Interview held: October 2014
- the High Commission for National Protection (Haut-Commissariat à la Protection Nationale)
 - Interview held: November 2014



Driving Innovation in Crisis

European Resilience

Management for

MALTA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Linette de Swart and Rachel Beerman)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Malta is assessed as being one of the safest places in the world according to the United Nations University World Risk Index where Malta scores 0.62, ranking as the second safest country in the world after Qatar. This very low risk ranking stems to a large extent from the very small exposure of the country to natural disasters rather than from the organisational capacity of the domestic risk management system that rarely has to step up to tackle major risks.

Malta is equipped with a rather centralised, one-level system for civil protection which is due to the small scale of the country that allows for no distinction between the local, regional and national levels of crisis management. The whole crisis management system is based on a single, higher-level legislative act, the Civil Protection Act, which describes the key functions of the system but does not go into detail regarding the organisation of the system. Although the Civil Protection Act of 1999 aimed at restructuring and consolidating the disaster management system is under the overview of a sole authority, the Civil Protection Department (CP Department); some fragmentation of processes and responsibilities still exist due to the appointment of alternative competent authorities such as the Armed Forces of Malta (AFM), the Transport Malta authority of the Ministry of Transport and the Ministry of Energy and Health for the specific risks areas such as maritime search and rescue (SAR), maritime pollution and health emergencies respectively.

The civil protection system is placed under the supervision of the Minister of Home Affairs and National Security, who is responsible for the strategic orientation of the system, closely consulted by the Civil Protection Council – consisting of representatives of the key actors of the crisis management system. A large part of the relevant functions and decisions of the involved stakeholders runs on informal procedures based on the institutional knowledge built over the years by the different stakeholders. This informal approach combined with the low base risk contributes to the relevant negligence of formally and regularly updating risk assessments and producing defining policy document. This in turn makes the disaster management system more reactive than proactive.

The backbone of the disaster management mechanism consists of the CP Department that is tasked with coordinating the actions of the other governmental, non-profit, volunteer and private organisations and providing the relevant infrastructure during emergencies. It proposes legislation and policy adjustments, focuses on preparedness of the system by providing training courses and organising exercises and promotes international cooperation and knowledge exchange, activities taking place especially within the framework of the EU and limited bilateral agreements.

In any case, the Maltese system is highly dependent on the contribution of the volunteer sector, either as emergency units within the ranks of government bodies, or as independent organisations such as the Red Cross, or the St. John's Ambulance.

All together, the key limitations of the crisis management mechanism, such as the limited permanent personnel, the lack of specialised administration for specific types of emergencies and the lack of an updated institutional framework with document providing a clear policy orientation, indicate that the Maltese system might reach its limits in the event of a major crisis.

Table of Contents

MALTA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1125
Overview	1126
Table of Contents	1127
List of Figures	1129
List of Tables.....	1129
List of Abbreviations.....	1130
1 Policy	1131
1.1 Risk Assessment	1132
1.2 Policy and Governance	1134
1.2.1 Strategy scope and focus.....	1134
1.2.2 Monitoring and analytical support to policy making; R&D	1136
1.2.3 Policy for Prevention	1136
1.2.4 Policy for Preparedness.....	1137
1.2.5 Policy for Response	1138
1.2.6 Policy for Relief and Recovery	1139
1.3 Financing	1139
1.3.1 Investing in preparedness	1139
1.3.2 Investing in consequence management.....	1140
1.4 Policy review, Evaluation & Organisational Learning	1140
1.4.1 Post-Disaster Assessment and Lessons Learned	1140
1.4.2 International exchange for Lessons Learned.....	1141
1.4.3 Regular policy reviews.....	1141
1.5 Resilience	1142
1.6 Information sharing and data protection	1142
2 Legislation	1143
2.1 Crisis (emergency, disaster) management concept.....	1143
2.2 General crisis (emergency, disaster) management law.....	1145
2.3 Emergency rule	1145
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1146
2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1146

2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1146
2.7	Legal regulations for international engagements of first responders and crisis managers 1147	
3	Organisation.....	1149
3.1	Organisational chart.....	1149
3.1.1	Government organisations	1149
3.1.2	Volunteer organisations	1151
3.1.3	Private sector cooperation	1153
3.1.4	Lines of communication and command	1153
3.2	Organisational cooperation	1155
3.2.1	Domestic organisational cooperation	1155
3.2.2	Cooperation with foreign countries	1156
4	Procedures	1157
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1157
4.2	Operations planning	1157
4.3	Logistics support in crises	1157
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1158
5	Capabilities.....	1159
5.1	Human resources	1159
5.2	Materiel (non-financial) resources	1159
5.3	Training	1161
5.4	Procurement	1163
5.4.1	Procurement regulation	1163
5.4.2	<i>Procurement Procedures</i>	1166
5.5	Niche capabilities	1168
	Resources	1169
	Legislative acts	1169
	Official documents (white papers, strategies, etc.)	1169
	Online resources (e.g. websites of key CM organizations)	1170
	Publications	1170
	Expert interviews	1171

List of Figures

<i>Figure 1-1: Past surface water flooding areas in Malta</i>	1136
<i>Figure 3-1: Organisational chart of the Maltese Civil Protection system</i>	1149
<i>Figure 3-2: Oil spill control exercise performed by Transport Malta</i>	1151
<i>Figure 3-3: Volunteers serving in the EVRF (left) and the SPIDER team (right)</i>	1152
<i>Figure 3-4: Lines of communication</i>	1155
<i>Figure 3-5: Lines of command</i>	1155
<i>Figure 5-1: The Civil Protection Department local stations in Malta and Gozo</i>	1160
<i>Figure 5-2: SAR vessel of the AFM</i>	1160
<i>Figure 5-3: humanitarian aid collection by EFRU volunteers</i>	1161
<i>Figure 5-4: Malta Red Cross training in water rescue</i>	1162

List of Tables

<i>Table 1-1: Malta World Risk Index Scoring</i>	1132
<i>Table 1-2: Major civil security crisis in Malta for the period 2000-2012</i>	1134

List of Abbreviations

AFM	Armed Forces of Malta
CECIS	Common Emergency Communication and Information System
CP	Civil Protection
EFRU	Emergency Fire Rescue Unit
ERCC	Emergency Response Coordination Centre
EVRF	Emergency Volunteer Reserve Force
HAS	Home Affairs and National Security
MARL	Malta Amateur Radio League
MIC	Monitoring Information Centre
NCC	National Crisis Centre
NGOs	Non-Government Organisations
PFRA	Preliminary Flood Risk Assessment
RA	Risk Assessment
RAF	Rescue and Assistance Force
SPIDER	Specialised Personnel In Disaster and Emergency Response
SAR	Search and Rescue
SOPs	Standing Operating Procedures
SWMP	Storm Water Master Plan
THW	German Federal Agency for Technical Relief

1 Policy

The definition used for a disaster in Malta, in accordance to the Civil Protection Act of 1999, is:

“Disaster means an unforeseeable event which causes or threatens to cause damage to the lives and health of a significant number of people, or to property or to vital supply resources of the population or to the environment, and the urgency of the situation requires the co-operation of authorities, institutions, and organisations for prompt remedial action”¹⁶⁶¹

Until the establishment of the Civil Protection Department in 1999, crisis management and civil security were in the hands of the police force and the national security services. Since the Civil Protection Act of 1999, a Minister is appointed as head of the country’s civil protection services. Currently the Minister of Home Affairs and Security (HAS) and in specific the Civil Protection Department of Malta, take up the lead role in civil protection services and the coordination of all relevant stakeholders. Exceptions to this rule are the lead role in crisis response for incidents related to maritime pollution belonging to the Transport Malta authority, maritime search and rescue (SAR) falling under the responsibility of the Armed Forces of Malta (AFM) and that for pandemics where the lead role in the crisis response belongs to, the Ministry of Energy and Health. In all these cases, the CP Department complements their efforts.

The Civil Protection Council, which resembles a crisis management task force (the members of which are appointed by the Prime Minister), acts as an advisory to the government body regarding civil protection issues, while it is also responsible for approving the national contingency plans.

Due to the small size of the country, there is no separation between local, regional and national level in matters of crises management¹⁶⁶². Crisis management is seen as a national effort to which the military is a major contributor. Amongst its secondary roles, the AFM are tasked with providing emergency protection support, while it maintains the lead role in research and rescue in the territorial waters of the country.

Continuing the long-standing tradition of Malta in social solidarity, the Maltese crisis management concept is heavily based on the participation of volunteer bodies. Volunteer organisations such as the Malta Red Cross, the St. John’s Ambulance and the SPIDER volunteer unit (Specialised Personnel In Disaster and Emergency Response) of the CP Department are substantial contributors to the preparedness, response and relief effort of the national disaster system, focusing especially on the provision of trainings to the public and first response services.

¹⁶⁶¹ Article 2, Civil Protection Act, 1999

¹⁶⁶² The Civil Protection Act does not indicate different approaches in assigning responsibilities to authorities for national, regional or local level of crisis management. In this Act national and regional level of disaster management are specifically mentioned while no reference to the local level of crisis management is present.

1.1 Risk Assessment

The **Civil Protection Department (CP Department)** is, according to Maltese legislation, responsible for the preparation of vulnerability and risk assessment studies. In principal, in Malta there is only one overall national-level Risk Assessment (RA) study with no separate, sector-specific RAs being developed. However, in areas where the lead responsibility does not lay with the CP Department as specified in the CP Act, separate risk assessments may be drawn. The CP Department additionally checks and inspects the RA plans prepared by individual organisations and departments, because the CP department is responsible for the coordination at a national level in case of such incidents.

The current national RA plan of the CP Department dates from just after its establishment in 1999 and is considered largely outdated. The CP Department is therefore in the process of procuring the revision of the current Master Plan for natural disasters, including an update of the RA plans. A tender is planned as part of this procurement process.

According to the ANVIL¹⁶⁶³ country report for Malta, the Maltese risk assessment approach is mainly incident-based with limited focus on performing further exercises of national risk assessments that would assist in preparing more efficient emergency plans. Nevertheless, according to the United Nations University World Risk Index which is defined as:

*“the risk of becoming the victim of a disaster resulting from an extreme natural event”*¹⁶⁶⁴

Malta is assessed as being one of the safest places in the world with risk rated at 0.62%, which ranks Malta as the second safest country in the world after Qatar. Table 1-1 present the rating of Malta for each of the composing elements of this indicator. In this index, the susceptibility, coping capacity and adaptive capacity of each country is assessed and multiplied with its population’s exposure to natural disasters to derive the risk for each country.

Table 1-1: Malta World Risk Index Scoring

Malta World Risk Index	Exposure	Vulnerability	Susceptibility	Lack of coping capacities	Lack of adaptive capacities
0.62%	1.65%	37.67%	15.28%	59.58%	38.16%

Source: UNU-EHS, World Risk Report 2014

Malta is considered minimally exposed to natural disasters, making up for a very low exposition rating. Nevertheless, the Maltese civil protection system is steered towards countering the main areas of concern with high possibility and impact of incidents¹⁶⁶⁵:

- Flash floods;
- Industrial and transport accidents; and
- Large scale pollution from hydrocarbon spill.

¹⁶⁶³ ANVIL - Analysis of Civil Security Systems in Europe - <http://anvil-project.net/>

¹⁶⁶⁴ UNU-EHS, World Risk Report 2014

¹⁶⁶⁵ ANVIL - Analysis of Civil Security Systems in Europe; Country Study Malta, 2013

Flash floods are the most frequent disasters occurring in Malta. They usually take place in early autumn and cause mainly damage to infrastructure, while also human casualties have been reported in some cases. Under the EU Flood Directive 2007/60/EC, Malta has been committed to prepare a Preliminary Flood Risk Assessment (PFRA) study to feed a flood risk management plan.

Almost as frequent are transport, especially maritime, accidents occurring usually in the summer months. During the last decade, also a couple of industrial incidents related to firework factories have been classified as disasters. Finally, with the increasing maritime traffic through and nearby the Maltese territorial waters, and especially after the Deep Horizon incident in the Mexican Gulf, the need to assess the risk of a large-scale hydrocarbon spill to prepare an efficient response has aroused.

Classified as less likely, but bearing significant impacts are the risks deriving from the possibility of:

- A high intensity earthquake;
- A terrorist attack;
- Transport isolation due to an eruption of Mount Etna.

Despite the main threats recognised in the risk assessment mentioned above, according to Malta's prime Minister Lawrence Gonzi, the most challenging incident regarding national security in recent Malta's history, did not come out of any of the areas above, but was rather the recent Libyan crisis of 2012. This crisis posed a challenge on multiple levels to Malta ranging from the management of civil war refugee flows, to the coordination of regular, emergency and military flights over the country's Airspace and to the evacuation of Maltese and other nationals from Libya. The first time the national contingency centre was ever used was during the Libyan crisis in 2012.¹⁶⁶⁶

Analytically, Table 1-2 presents a list of incidents classified as civil security crises in Malta for the period 2000-2012 according to the ANVIL project and based on the *International Disaster Database*¹⁶⁶⁷ and publications on the Maltese press.

¹⁶⁶⁶ <http://www.independent.com.mt/articles/2012-09-14/news/learning-from-the-libyan-crisis-315959/>

¹⁶⁶⁷ <http://www.emdat.be>

Table 1-2: Major civil security crisis in Malta for the period 2000-2012

Year/Month	Crisis Description	Crisis Category	Damage		
			Persons killed	Persons injured	Persons affected
Every autumn	Flash Floods	Natural disaster			Whole society
February 2004		Transport Accident	16		4
August 2005		Transport Accident	26		2
June 2006		Transport Accident	11		
July 2006		Transport Accident	17		
June 2007		Transport Accident	22		4
August 2007		Transport Accident	10		13
August 2008		Transport Accident	10		8
2009	Swine Flu	Pandemics/ infectious diseases	4		Whole society
September 2010	Farrugia Brothers Fireworks Factory Explosion	Industrial accident	6		
February 2012	Libya Crisis	External crisis			Whole society
November 2012	Gharb Fireworks Factory Explosion	Industrial accident	4		

Source: ANVIL, Malta country report, 2012

1.2 Policy and Governance

1.2.1 Strategy scope and focus¹⁶⁶⁸

Crisis management in Malta is centralised as no distinction between local, regional and national level of civil protection is made. Due to the country's size, every type of crisis event unavoidably mobilises the national crisis management mechanism since there is local crisis management level of response. The small size of the country and especially the small size of the disaster management system in combination with the absence of highly impactful disasters in the recent history of Malta have led to a large part of the processes in place being on an informal basis and relying on institutional memory with limited documentation of processes.

The government receives advice on the civil protection policy direction and the approval of risk assessments and disaster management master plans from the **Civil Protection Council (CP Council)** of Malta. This is comprised of high ranked government officials from relevant government authorities. Moreover, the **Civil Protection Scientific Committee**, consisting of University and private sector representatives provides the government with advice regarding scientific issues of civil protection policy and especially on topics related to fields where state expertise is limited (e.g. water purification and waste management).

¹⁶⁶⁸ There is no documentation publicly available on the strategy scope and focus of the Disaster Management system of Malta. Thus, this section is to a large extent based on the interview conducted with the CP Department of Malta.

The CP Department of the Ministry of Home Affairs and National Security is the centrepiece of the disaster management system of Malta and has the responsibility for the coordination of all stages of disaster management, stretching from prevention and preparedness to response and recovery for all types of incidents with the exception of maritime SAR, maritime pollution and pandemics where it is tasked to support the assigned competent authorities in crisis management:

- The AFM of the Ministry of Home Affairs and National Security for maritime SAR;
- The Transport Malta authority of the Ministry of Transport for maritime pollution;
- The Health Department of the Ministry of Energy and Health for pandemics.

All other relevant governmental authorities and organisations (i.e. the Police, the AFM, and the Health Department etc.) can be summoned by the CP department to support the disaster management effort.

Alongside the central role of the state in crisis management, there is also a strong societal support to the disaster management cause. Volunteer organisations take up a significant role especially in disaster response and the relief, either under independent entities such as the Red Cross and the St. John's Ambulance or contributing as emergency personnel of state organisations such as the CP Department and the AFM.

Altogether, given the very good overall safety assessment of Malta, the civil protection system is steered more towards the disaster management phases of preparedness and response adopting a rather reactive approach to disaster incidents. With the disaster management system stripped from an updated general or a sector specific risk assessment, preventive actions could be misdirected and areas of potential risk neglected.

Relatively more weight is placed towards the phase of preparedness where trainings and exercises occur regularly and relevant material and equipment is stockpiled. However, the coordination of the preparedness phase for crisis management could be even more efficient at a central level as currently each potentially involved organisation defines its strategy to preparedness and retrospectively coordinates with the CP Department which is minimally, if at all, involved in the preparedness design.

The response phase is probably the phase on which the most attention is placed in the Maltese system. This is clearly coordinated by the CP Department or any other competent authority in accordance to the scope of the incident with clear roles and lines of communication for the parties involved. Finally, the absence of large and unmanageable disaster incidents in the recent Maltese history has led to less attention steered towards developing a detailed recovery and relief policy.

An exception to the disaggregated and incomplete general disaster management policy cycle is the area of flash-floodings prevention. The frequency of the occurrence of this type of disaster, combined with the provision of the EU Flood Directive, prescribing the need for a Storm Water Master Plan (SWMP) followed by a sector-specific, scoping Preliminary Flood Risk Assessment (PFRA). (In Figure 1-1 the areas of the island that have experienced previous surface water flooding are indicated. The PRFA indicates the direction of flood-related disaster management policy identifying

the focus areas, while the SWMP identifies measures and projects that could be undertaken to mitigate the consequences of flash-floodings in the long run. These measures and projects include: flooding prevention, protection, preparedness and early warning systems aiming in enhancing the resilience of the system.

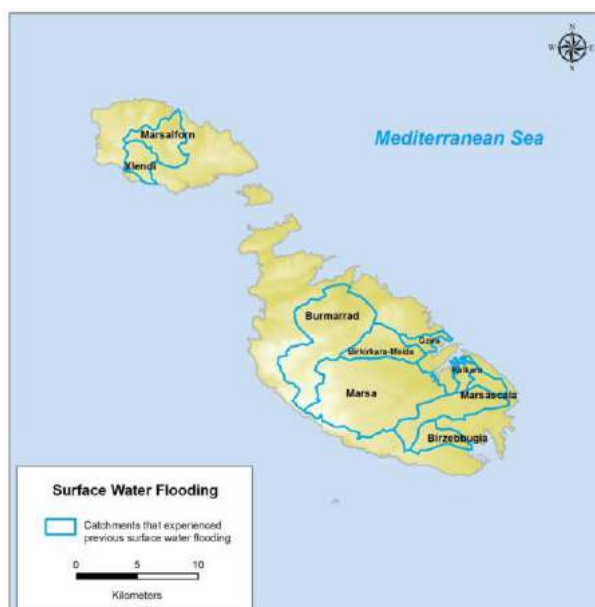


Figure 1-1: Past surface water flooding areas in Malta¹⁶⁶⁹

1.2.2 Monitoring and analytical support to policy making; R&D

The CP Department is tasked with performing the disaster risk assessments and providing views and suggestions on the direction of civil protection policy to the CP Council which consults the Minister on the options suggested. However, the main institution linking scientific research with policy decisions is the CP Scientific Committee that advises the government and the CP Department on scientific issues, especially in knowledge areas where state knowledge is limited such as water purification and waste treatment and management.

Beyond the consultations with the CP Scientific Committee, there are a few research cooperation projects taking place, with the most significant scientific partner to the government in this being the University of Malta. One of the most significant research projects relate to modelling potential hydrocarbon pollution dispersion in sea. This research is performed in cooperation with the Oceanographic Department of the University of Malta under the SIMED¹⁶⁷⁰ project.

1.2.3 Policy for Prevention

The Civil Protection Department works with other governmental and non-governmental actors in order to reduce and eliminate the risks of emergency situations occurring, thus protecting the

¹⁶⁶⁹ Source: Malta Resources Authority (MRA), Preliminary Flood Risk Assessment (PFRA), 2013

¹⁶⁷⁰ SIMED: Modelling of circulation and marine ecosystems of the Mediterranean Sea with NEMO-MED12

population, the environment and the property of Malta. The CP Department is also responsible for awareness raising of the public regarding civil security crisis and risks.

However, the concept of prevention is not explicitly laid down in the Maltese civil protection system and the only sector-specific master plan with an explicit prevention orientation is that regarding water flooding. Under the EU Floods Directive 2007/60/EC, which Malta has adopted in its national regulation¹⁶⁷¹, Malta has committed to prepare a PFRA study and a subsequent flood risk management plan to manage and reduce risks in areas identified as running significant flood risks. The existing SWMP targets the economic, social and environmental consequences of floodings in Malta and puts forward a strategic, objective-driven approach to manage storm water in the long-term. This plan consists of:

- a) alternative engineering proposals for storm water management and reuse;
- b) a strategic approach for selecting the preferred alternatives;
- c) a maintenance programme;
- d) implementation measures including organisation, legislation, training, financing and monitoring.

1.2.4 Policy for Preparedness

The Civil Protection Department is part of the Maltese network responsible for maintaining safety and security of the general public. They take up the lead role in the country's preparedness policy the main objective to organise civil protection services by coordinating the capabilities and resources available to other ministries and departments such as the Police, the AFM and the health authorities. Moreover, the CP Department aims to reduce the risks from man-made disasters and prepare the response to natural disasters that may occur. The CP Department is therefore required to prepare contingency plans to be put in action in case of crises. These plans are approved by the CP Council consulting body. Additionally, the CP Departments is responsible for arranging the infrastructure necessary to provide smooth interdepartmental coordination when tackling a civil security incident. Currently contingency plans exist for the events of earthquakes, floods and wars in the neighbourhood.

To secure a high level of preparedness of its staff, the CP Department organises a number of training courses for both its permanent members and the volunteers of the CP Department. Furthermore, part of the CP Department contribution to the preparedness policy, is its task to organise training courses and safety exercises for fire-fighting, basic rescue and first aid for both the general population as well as for the civil forces expected to contribute in crises management (Police, Fire Brigade etc.). The volunteer organisations of Red Cross Malta and the St. John's Ambulance Malta also contribute to the preparedness aim by organising first aid training courses for the public, which are coordinated with the CP Department's training cycle. Finally, the CP department itself participates in EU training programmes as it also designs to offer a SAR module in Malta for its European counterparts. Additionally, bi-lateral cooperation in providing training to staff members is arranged with Italy through the Memorandum of Understanding signed by the Italian *Gruppo Operativo della Protezione Civile Edelweiss*. Under this agreement members of the Maltese Civil

¹⁶⁷¹ Assessment and Management of Flood Risks Regulations, L.N. 264 of 2010

Protection provided training to the Italian civil protection team, while a number of volunteers and members of the Civil Protection Department had the opportunity to perform training in the region of Calabria.¹⁶⁷² Also the SPIDER Unit has established a similar cooperation with the between the SPIDER Unit and the German Federal Agency for Technical Relief (THW).

Additionally, disaster management simulation exercises form a fundamental part of the Maltese system policy for preparedness. These exercises may be performed by the CP Department alone, or in combination with other state or volunteer organisations. One of the objectives of these training exercises is to test the interoperability techniques among agencies in events of disasters.

Furthermore, the CP Department oversees the preparations of the contingency plans of all organisations and authorities in Malta. Then, based on an annual plan, inspections take place to test the preparedness of all organisations and authorities to execute their contingency plans.

1.2.5 Policy for Response

The CP Department takes in principal the leading role in emergencies, in case the safety of the public is concerned. The CP Department, under the headship of the Ministry for Home Affairs and National Security and supported by a group of experts from various governmental departments, is responsible for the effective response of the civil protection system to any disaster by coordinating all necessary and available resources in case of any major disaster.

During emergency situations, the Rescue and Assistance Force (RAF), which is set up under the umbrella of the CP Department, operates with the purpose of maintaining an adequate service for prompt intervention in case of an emergency, whether occurring on land or at sea. Throughout the whole disaster response duration, the CP Department has the leading role (except for the instances described in 1.2.1 where it supports other leading state authorities) and an CP Department officer is nominated as **Incident Site Commander** by the Director of the CP Department. The Incident Site Commander is granted authority to request the assistance of other government departments as well as from the private sector, as he sees necessary, to stem possible dangers for civilians and to resume public safety.

The AFM holds a major role in the provision of emergency protection support especially responding to the emergencies related to explosives, marine pollution and floods, but also beyond these aspects the organisation provides trained personnel and equipment to support the response effort of the CP Department. They also take the lead in incidents of marine SAR. In their effort, they are supplemented by the Emergency Volunteer Reserve Force (EVRF) of the AFM. Other organisations that may be summoned to support the CP Department are the Health Department, the Police and volunteer NGOs.

The limited public sector response capacity is largely complemented by the all-society response culture in the event of major crisis events adopted by the Maltese society. An important role in

¹⁶⁷² E.F.R.U. volunteers back from overseas training in 'Swift Water Rescue'

mobilising response capacity for emergency events is located among volunteer organisations and the private sector. This is mirrored by the important role enjoyed by volunteer organisations in cases of crises management. The EVRF are not the only volunteer organisation contributing to disaster management. Volunteer organisation such as the Malta Red Cross, the St. John's Ambulance and the Specialised Personnel In Disaster and Emergency Response (SPIDER) take up a critical role in when response to emergency situations is required.

Additionally, the private sector can be recruited by public authorities to contribute to the emergency response effort. The cooperation between private enterprises and the public authorities is mainly based upon informal arrangements.

1.2.6 Policy for Relief and Recovery

Again, the leading role in the phase of recovery and relief lays in principal with the CP Department which is responsible for providing humanitarian aid and mobilises the contribution of other government authorities and volunteer organisations if needed. Exceptions to this are the cases of maritime pollution, and pandemics where the lead is hold by the Ministry of Transport and the Emergency Healthcare Department respectively. In case of maritime SAR that is performed by the AFM, the CP Departments takes over as soon as the rescued people are onshore. Nevertheless, especially in cases where a large number of people are affected, the humanitarian aid cannot be handled by the CP Department exclusively, which has to rely considerably on the support it receives from the other governmental departments and the volunteer organisations.

1.3 Financing

1.3.1 Investing in preparedness

The funding of the CP Department stems predominantly from the government budget, with only a small part of the budget coming from alternative money streams. These originate mostly from EU funds. An example of the utilisation of EU funds to invest in preparedness is the co-funding of the SWMP by the EU Cohesion fund. Through the 2014 Budget¹⁶⁷³, the Government of Malta announced its intention to further invest in preparedness by initiating an investment programme for emergency vehicles and examining the need and spread of fire fighting stations while planning to transfer the Departmental Headquarters to a new location at Mosta also upgrading their facilities.

The funding of volunteer units that operate within public authorities such as the SPIDER team of the CP Department and the EVRF of the AFM originates from public funding as well. On the other hand, independent volunteer organisations rely to a lesser extend on government financing and draw their financial resources through a variety of private means (such as contributions of the volunteers themselves, donations from the general public and private sector sponsors). Additionally, the CP Department cited that they apply for funding of specific events (such as international collaboration and training) and procuring necessary equipment to EU funds earmarked for such activities.

¹⁶⁷³ Ministry of Finance of Malta, Budget Speech 2014, 4th November 2013

1.3.2 Investing in consequence management

In principal, the CP Department and consequently the Ministry of Home Affairs and National Security, should have budget available to cover the cost of recovery from disasters. However, in case extraordinary expenses are needed to offset the consequences of a disaster, the central government provides this additional funding. There are also EU specific funds contributing to recovery of specific types of disasters. The CP Department cited as relevant examples the application of the Asylum and Migration Fund and the Internal Security Fund of the EU which contribute to the better management of migration flows and border security, partly overlapping with scope of activities of the CP Department.

1.4 Policy review, Evaluation & Organisational Learning

There is no legal or policy document stipulating the process for lessons learning regarding civil security. However, exploitation of past events in order to improve the responsiveness of the disaster management system is implicit in a number of practices.

1.4.1 Post-Disaster Assessment and Lessons Learned

Due to the size of the Maltese disaster management system and the lack of different vertical layers of organisation, the post-disaster assessment is an undistinguishable part of the lessons learned process. Thus, in this section, these elements of policy review are examined simultaneously.

While there is no formally established system for assessing lessons learned, probably also due to the less frequent occurrence of major challenges for the Maltese crises management mechanism, national authorities are opting for the improvement of the overall system. Following any large-scale incident dealt by the CP Department, a de-briefing process takes place usually led by the CP Department to examine the facts leading to a crisis situation and the response of the agency. The involvement of additional organisations or authorities in the de-briefing process is arranged based on the type of incident addressed. Moreover when the incident type falls under the competence of other organisations (e.g. the AFM or the Ministry of Health), the leading role of the post-disaster assessment is transferred to the relevant actor and the CP department supports the activity.

The whole process is currently not a formalised one, nonetheless its findings feed in the update of existing standing operational procedures with changes to the procedures followed in case of emergencies, the issuing of new standing orders or the development of the guidelines used for the planning of future Civil Protection exercises. Past experience is especially utilised for updating the design of possible scenarios. The updated as well as the new documents produced are available within the CP Department and shared with other relevant organisations, but they cannot be considered as official documents.

An example of the system described is the aftermath of the *Libyan Civil War* crisis, and although Maltese authorities assessed the response to the crisis as successful, they formulate to derive some lessons for improving the overall disaster management system. One of the lessons learned was that more flexibility to take action was required at the level of individual agencies which would result from transferring some responsibilities held by executive bodies.¹⁶⁷⁴

After a de-brief process, the CP Department is responsible for putting forward proposals for the regulations required to respond better to disasters or emergencies. This is in line with the CP Department's task to continuously assess past disaster events and cope for the continuous improvement of the disaster management system as reported in the interview with CP staff.

1.4.2 International exchange for Lessons Learned

Malta participates in a number of international exchange programs, especially in the context of the EU programmes. Additionally it participates at bilateral training exchanges with authorities from the southern regions of Italy in an attempt to exchange best practices, learn from one another and bring knowledge back to improve the domestic system. Such bi-lateral collaborations contributing to international exchange of lessons learnt are those set up between the CP Department and the Italian *Gruppo Operativo della Protezione Civile Edelweiss* as well as the ones between the SPIDER Unit and the THW.

Specifically, the experience gained from the personnel (either permanent members of the CP Department or volunteers) deployed in EU and international exercises is exploited in accordance to EU guidelines and the participants in such exercises are required to write reports proposing improvements in existing procedures.

1.4.3 Regular policy reviews

A consequence of the risk assessment of the Maltese disaster management system is the absence of a regular process of policy review. The official policy to disaster management is described in the *Master Plan for Disaster Management*. With this document adopted more than 15 years ago it can be considered largely outdated. The CP Department is currently engaging into the preparation of its update to bring it in line with more recent developments with this process expected to end within 2015.

The CP Council comprises of representatives from the CP Department (in charge of preparing policy), the Minister of Home Affairs and National Security (responsible for approving policy), other relevant governmental organisations (as mentioned earlier) and a representative of other volunteer organisations. This guarantees the participation of all relevant stakeholders in the process of Master Plan preparation by consulting the Minister over the policy directions as well as specific elements of the Master Plan. Additionally, the CP Scientific Committee brings in the process the views of the

¹⁶⁷⁴ <http://www.independent.com.mt/articles/2012-09-14/news/learning-from-the-libyan-crisis-315959/>

industrial and scientific stakeholders, with emphasis in knowledge areas with limited governmental expertise.

1.5 Resilience

Although the implementation of the concept of resilience is currently discussed within the CP Department in view of the upcoming update of the Master Plan for *Disaster Management*, there is still no reference to the implementation of this concept within the policy framework of the Maltese civil protection system. The only exception to this is the SWMP which adopts a more systematic approach to tackling potential risks investing also into the resilience concept for flood protection.

1.6 Information sharing and data protection

The CP Department maintains a central database containing information of the registered volunteers. This includes their contact information, address and phone number, occupation and trainings followed contact information and training followed with the CP Department in order to be able to more appropriately match them with the occurring needs. Based on these data, the volunteers are notified in case of emergencies.

These data regarding volunteers are kept for internal use of the CP Department only, as the Data Protection Act of 2001 makes it very difficult to justify transfer or sharing of personal data with other organisations. Similarly, the CP Department has no access to information collected by the AFM regarding the EVRF corps, or similar databases of other relevant stakeholders.

Using social media

Currently there is no plan in place to utilise data collected by social media or other sources, probably also due to the low base risk factor of Malta.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The Civil Protection Act Chapter 411 (Act No. XV of 1999) is the sole official document arranging the main institutional aspects of civil protection and it provides for the establishment of a Civil Protection Department and an Rescue and Assistance Force Unit (RAF) within it. There, “disaster” is described as:

“...an unforeseeable event which causes or threatens to cause damage to the lives and health of a significant number of people, or to property or to vital supply resources of the population or to the environment...”

This broad definition blurs the boundaries of civil security and national security engagement which is not clear in all cases. Nevertheless, a working agreement, described by an internal document, has been achieved between the CP Department, the AFM, the Police and the other relevant governmental authorities, bringing a rather seamless cooperation and understanding of the division of responsibilities.

Amongst other provisions, the Civil Protection Act (CP Act) defines the responsibilities of the Minister of Home Affairs and National Security regarding Civil Protection in the country and sets the foundations for the CP Council, the CP Department and the Rescue and Assistance Force while defining the scope of their activities.

According to Article 5 of the CP Act, the CP Council is composed of the following *ex officio* members:

- the Minister for Home Affairs and National Security (Council Chairman);
- the Permanent Secretary of the Ministry for Home Affairs and National Security (Council Deputy Chairman);
- the Director of Civil Protection;
- the Commissioner of the Police;
- the Armed Forces Commander.

and up 7 members appointed by the Prime Minister, which are:

- up to 5 senior officers from the ministries responsible for issues relevant to civil protection (i.e. public works, environment, telecommunication and transport, health, economic affairs, energy and Gozo affairs);
- a member chosen after consultation with NGO representatives;
- a member nominated from the Local Councils Association.

The CP Council comes together in regular meetings every 3 calendar months and can be considered as the main consultative body to the competent Minister, both in times of emergency as well as

during its regular consultation sessions. According to Article 6 of the CP Act The CP Council is responsible for:

- formulating, directing and coordinating national civil protection policies and practices;
- directing and coordinating preparations of civil protection tasks required in case of disasters or emergencies;
- advising the Minister on the selection of the national overall Incident Site Commander to deal with particular emergency events or disasters;
- approving emergency and disaster contingency plans, guidelines and codes;
- monitoring the CP Department operation;
- advising the Minister on measures for the protection of the public;
- encouraging and supporting emergency preparedness; and
- coordinating the development of civil protection volunteer organisations.

Complementary to the role of the CP Council, is that of the CP Scientific Committee. This Committee is formed by representatives of the industry and academics and its role is to consult the Minister and the CP Department on scientific aspects, especially in the areas where limited government capacity is to be found.

However, the organisation that comprises the backbone of the disaster management system is the CP Department. The CP Department was established with the Civil Protection Act of 1999 as the evolution of the Fire Brigade service. Upon its creation it got staffed with experts from various governmental departments in order to be able to prepare for and coordinate the response to any major disaster. The CP Department is placed under the headship of the Ministry for Home Affairs and National Security of Malta and according to Article 4 of the Civil Protection Act, it retains responsibility for the:

- preparation of contingency plans to respond to natural or man-made disasters;
- organisation and co-ordination of training facilities and courses for the personnel that is required to respond to disasters;
- establishment of the necessary infrastructure for the coordination of the organisations involved in emergency response;
- preparation of risk and vulnerability assessment studies;
- promotion of public awareness in civil protection issues;
- preparation of regulations required to respond to disasters or emergencies under the Civil Protection Act and the Emergency Powers Act;
- perform any other functions related to civil protection assigned by the responsible Minister;
- maintenance of an assistance and rescue force.

The last is achieved through the establishment of the RAF according to Article 8 of the CP Act. The RAF is tasked with:

- maintaining an adequate service for prompt intervention in the case of natural or man-made disaster situation which requires the immediate assistance of a public force or special equipment;
- intervening in any emergency or disaster;
- carrying out any of the duties assigned to it by the Director of Civil Protection.

2.2 General crisis (emergency, disaster) management law

The CP Act is the legislative document that also defines the hierarchy of command during emergency events and disasters. According to the Article 9 of the Act; in case of an event, the Minister, after consulting with the CP Council can appoint an Incident Site Commander who acts as a national coordinator for the response effort. This Commander can consult, for the better performance of his tasks the CP Council and the CP Scientific Committee, while he coordinates the response efforts of the CP Department and of any other state authority he has summoned for support in tackling the crisis events.

Other management procedures are arranged via the internal standing operating procedures or other administrative documents of the authorities involved.

Complementary to the provisions of the CP Act, and arranging specific aspects of the disaster management system are:

- the Emergency Powers Act in combination with the CP Act defines the aspects relevant to the declaration of Emergency rule (as explained in detail in the following section);
- the Voluntary Organisations Act defines the framework for the operation of volunteer organisations, allowing them to support the government also in the field of civil protection;
- The Data Protection Act sets the underlining conditions for the operation of the collection and management of personal data of the individuals involved in the disaster management system.

However, the two latter documents do not make explicit reference to the disaster management effort, but rather continue to apply also in this occasion.

2.3 Emergency rule

In case of emergency, Article 9 of the Civil Protection Act prescribes that the Incident Site Commander, the Director of the CP Department or the highest ranking official of the Rescue and Assistance Force has, according to his judgement and if indispensably necessary for the operations relevant to emergency response the power, to:

- order immediate requisition of any property necessary for the operations,
- order the evacuation of persons from any premises,
- enter any premise without the need of a warrant,
- cause damage to any private property to prevent life threats and spreading of any event effects.

Even more far-reaching are the provisions of Article 4 of the Emergency Powers Act which are applied when the President of Malta, acting in accordance with the advice of the Prime Minister, declares that a public emergency exists. Then, the President of Malta, aiming to *“ensure public safety...and for maintaining supplies and services essential to the life of the community.”* may proclaim the entry into force of emergency powers. This wording allows for the activation of the emergency powers also in response to disasters hitting Malta. Amongst others, the emergency

powers bring limitations to individual rights and liberties. The emergency powers confer extended powers to the President of Malta, which amongst others concern:

- making provision for the detention of persons;
- authorizing on behalf of the Government the taking of possession or control of any undertaking or property with the exception of land property;
- authorizing the entering and search of any premises;
- providing for amending any or suspending the operation of any law, and for applying any law with or without modification;
- providing for payment of compensation and remuneration to persons affected by the regulations.

Any regulatory change brought into effect under the emergency power provisions will cease to have any effect after 2 months from the day it comes into operation except in case the change is approved by the House of Representatives in the meantime.

Additionally, Article 10 of the Malta Armed Forces Act of 1982, sets the framework for extending the service of soldiers in the event of a great emergency, while Article 32 of that same Act foresees the callout of reserved forces (whether they belong to Malta's regular or territorial force): *'If it appears to the president of Malta that national danger is imminent or that a great emergency has arisen...'*

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Due to the size of Malta and its CP Department, no division between departmental and national government level legislation is introduced. Regarding the involvement of local level actors, the only field that they form part of the disaster management system is in the field of environmental pollution.

In this case, local councils form part of the surveillance system while they are responsible also for risk management at schools and the local industry.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In Malta there are no lower than national level legal arrangements and regulations in the Maltese civil protection system. See paragraph 2.4.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

As mentioned earlier, the civil protection system of Malta relies heavily on the involvement of volunteer organisations. For the involvement of volunteer units that operate within the organisations

and authorities participating in crisis management, such as the CP Department SPIDER unit and the EVRF volunteer unit of the AFM, the same legal provisions (see CP Act), internal rules and processes apply as to the involvement of their regular staff members.

The legal act prescribing the functioning of independent volunteer organisations and NGOs in Malta is the Voluntary Organisations Act of 2007. However this act only sets the legal status of volunteer organisations engaged in civil protection amongst the possible purposes for their foundation. There are no specific legal acts with provisions on the involvement of volunteers and specialised NGOs in disaster management as the CP Act only prescribes the responsibility of the CP Council to coordinate and encourage the development of voluntary organisations.

On a strategic level, the representative of voluntary organisations on the CP Council advise the Minister on the capacity and possibilities of volunteer organisations to support the CP Department or other public institutions in crisis management. Their operational coordination is informally arranged with the CP Department.

2.7 Legal regulations for international engagements of first responders and crisis managers

EU regulations

As an EU Member State, Malta has implemented the EU regulations regarding crisis management. This legislation comes mainly in the form of European Council Decisions that set out the general rules and conditions for cooperation. The main legislative acts regulating first responders and crisis managers are:

- Council Decision 2007/779/EC/Euratom of 8 November 2007 establishing a Community Civil Protection Mechanism; and
- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations.

The Council Decision 2007/779/EC/Euratom of 8 November 2007 was issued to set up an effective cooperation mechanism to coordinate rapid exchange of information and arrange assistance through an European network of civil protection resources. The Community Civil Protection Mechanism is based on establishing amongst others: an inventory of possible assistance and intervention teams at an EU level, a common training programme, a Monitoring and Information Centre (MIC) that forwards requests for assistance by affected Member States to a network of national contact points, a Common Emergency Communication and Information System (CECIS) and the provisions for facilitating the sharing of information on the resources available within the network.

The Council Decision 2008/617/JHA of 23 June 2008 aims to set a framework for the cooperation between Member States' special intervention units in crisis situations. The Decision establishes the general rules and conditions for the provision of assistance by special intervention units to any requesting Member State. According to the provisions of this Decision, the units from countries that

provide assistance take up an assisting role and act only within the limits and powers as defined by their own national law. To ensure that experience, expertise and information on managing crisis situations are exchanged joint trainings and exercises between Member States are promoted and may be funded from Community financial programmes.

Bilateral agreements

The CP department reported that Malta used to have bilateral agreements in place with its neighbouring countries for provision of assistance in crisis situations. Relevant agreements were signed with Italy and the Italian region of Sicily, Greece, Tunisia and Libya. The cooperation with Italy focuses on organising expert visits for exercises and their participation in training programmes on emergency response. The cooperation with Greece covers a broader range of civil protection activities such as: exchange of technical information, cooperation in pre-empting natural disasters and in tackling cross-boundary crisis.

Additionally, the Malta CP Department had developed cooperation with Algeria and Tunisia within the framework of the Euromed project where joint seminars and exchanges of best practises were organised. With the exception of the cooperation with Italy and Greece, the other bilateral cooperation projects have, in the aftermath of the Arab Spring, been rendered inactive.

Currently, cross-border activities of the Maltese authorities are focused on activities within the EU framework and regard mainly cooperation with the southern regions of Italy, and especially Sicily. During cross border incidents, the crisis centre is established in the Prime Minister's office, and the Ministry of Foreign Affairs gets involved in the operational decisions.

3 Organisation

Malta has no administrative divisions; all administration is based in Valletta. The crisis management system of Malta is, in a similar way, centralised with only one, national, level of organisation. The main contributors to the disaster management effort are the state organisations; however the system relies to a great extent on the support of volunteers and volunteer organisations.

3.1 Organisational chart

3.1.1 Government organisations

Policy-making and planning for civil protection in Malta takes place at a ministerial level and is at the hands of the Minister of Home Affairs and National Security. The **Civil Protection Council** (CP Council) is a consultative body to the Minister (and headed by himself) responsible of, amongst others, the formulation, direction and coordination of national policy issues, approval of contingency plans, guidelines and codes prepared by the CP Department, and providing advice to the Minister on measures for the protection of the public also during emergency incidents and to support emergency preparedness capabilities.

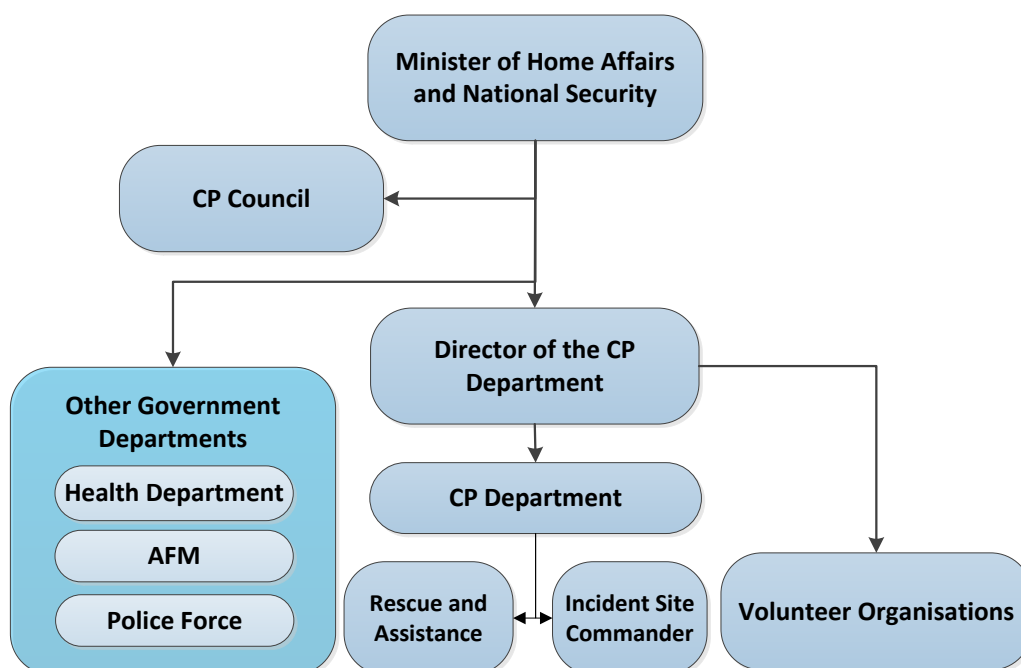


Figure 3-1: Organisational chart of the Maltese Civil Protection system ¹⁶⁷⁵

As presented in Figure 3-1, the cornerstone of the Maltese disaster management system, is the **Civil Protection Department** (CP Department). The CP Department is the national-level authority assuming the leading role in emergencies, where the safety of the public is concerned. This

¹⁶⁷⁵ Own design

organisation evolved from the Fire Brigade authority after the CP Act of 1999 and is the governmental body tasked with the preparation of the strategic, tactical and operational planning and its implementation. It is supervised by the CP Council which is headed by the Minister for Home Affairs and National Security. Most important, in accordance with the CP Act, the CP Department is responsible for the:

- preparation of contingency plans to respond to disasters and risk and vulnerability assessment studies;
- organisation and co-ordination of training facilities and courses for the personnel that is required to respond to disasters;
- preparation of regulations required to respond to disasters or emergencies;

Additionally, the CP Department takes the lead in the event of emergency incidents regarding the organisation of the response and the coordination of all other involved organisations under the guidance of the **Incident Site Commander** as appointed by the Minister.

The **Rescue and Assistance Force (RAF)**, is set up under the umbrella of the Civil Protection Department and operates with the sole purpose of maintaining an adequate service for prompt intervention in case of an emergency, whether occurring on land or sea. This Force, which is made up of about 110 staff members, operates from six different stations in Malta and one in Gozo. The members of this Force have to deal with everyday operations, ranging from domestic fires and rescue interventions to specialised tasks, such as hazardous substance control and technical diving operations.

Other key contributors to the Maltese disaster management system are government organisations that complement the competencies of the CP Department. The Police, the Armed Forces of Malta and the Health Department of the Ministry of Energy and Health are also significant parts of the system. These actors are all represented in the CP Council due to their role in crisis management. Additionally, during crisis events, these organisations all appoint a representative to coordinate with the Incident Site Commander, the same goes for the volunteer organisations that appoint a joint representative.

The **Department of Health** of the Ministry of Energy and Health is responsible for health-related services during emergency events. The Department of Health also takes the lead role in tackling crises predominantly related to health issues such as pandemics.

The **Armed Forces of Malta (AFM)** are tasked with providing emergency protection support to the CP Department as one of its secondary roles. Additionally, the AFM is appointed as the competent national SAR agency in Malta as it maintains the lead role in SAR operations related to disaster management within the territorial waters of the country. In case of emergencies, the military cooperates with the CP Department under the supervision of the Ministry for Justice and Home Affairs. Following SAR operations and when the need to provide civil protection services is transferred onshore, the responsibility is passed over the CP Department or other competent authorities.

During emergencies a representative of the AFM is in direct contact with the Incident Site Commander or other officials of the CP Department. Should the need appear to use special military assets; the AFM representative explains what can be made available from the side of the AFM regarding machinery, equipment, AFM premises or human resources. Then the Incident Site Commander decides what is needed for the disaster management operations and requests it to be made available.

The **Police** force of Malta is part of the civil protection system of the country charged with maintaining order, in matters of containing rioting and performing crowd control when needed in case of emergencies. Up to date, the utilisation of the Police force in disaster management operations has been seldom due to the limited impact of disasters to date.

Other public authorities may also become involved in crisis management depending on the scope of the incident, their availability of resources necessary for organising an efficient response to the crisis. Most notable example is that of the involvement of the **Ports and Yachting Directorate** of the **Transport Malta Authority** in incidents involving marine pollution since Transport Malta is the competent authority regarding the prevention and control of maritime pollution and relevant incident response.

Another public authority that is often involved in the activities of the CP Department is the **Cleansing Directorate**, providing - when requested by the CP Department - emergency cleansing services by making available the machinery and human resources necessary to remove debris and other obstacles when needed.



Figure 3-2: Oil spill control exercise performed by Transport Malta¹⁶⁷⁶

3.1.2 Volunteer organisations

The role of **volunteer organisations** in the Maltese crisis management system is especially important since they are complementing the limited public capacity to provide response, recovery and relief during and after disaster events. The RAF unit and the CP Department are supplemented in their efforts to disaster management by the **SPIDER** volunteer unit that provide first response in cases of emergencies. The SPIDER unit counts around 115 fully trained volunteers, which given the size of the

¹⁶⁷⁶ EEA grants; <http://eeagrants.org/News/2014/Keeping-oil-away-from-Maltese-shores>

Malta disaster management system consist a considerable addition to the existing disaster management capacity.

Another volunteer group operating within the ranks of a public organisation is the **Emergency Volunteer Reserve Force** (EVRF) that supplement the AFM in cases of emergency situations, the EVRF soldiers will perform in the event of disasters, amongst other military tasks, civil emergency duties in support of the civil administration as well as key point security guarding duties.



Figure 3-3: Volunteers serving in the EVRF (left)¹⁶⁷⁷ and the SPIDER team (right)¹⁶⁷⁸

Regarding independent volunteer organisations, a great variety of organisations operate in Malta and amongst their functions, support also the state authorities in disaster management. The main volunteer groups, mobilised in emergency events are: the Red Cross the St. John Association and the Emergency Fire Rescue Unit (EFRU).

The Malta branch of the **Red Cross** has been recognised by Act of Parliament¹⁶⁷⁹ as an autonomous voluntary Relief Society that acts auxiliary to the Public Authorities in accordance with the rules and principles of the International Red Cross movement. The mission of the organisation is to *“prevent and alleviate human suffering, improving the situation of the most vulnerable people with absolute impartiality and without discrimination as to race, nationality, gender, class, religious beliefs or political opinions”*. The Red Cross operates a small fleet of Ambulances in Malta to assist public authorities in providing first aid and humanitarian relief.

The **St. John** organisation assists the CP Department providing auxiliary services during disasters by providing a rescue team as well as a first aid and ambulance service. Additionally, both the Red Cross and the St John Ambulance organisations provide trainings to the general public on first aid, while a more complete training set is provided to their registered volunteers.

The **Emergency and Fire Rescue Unit** (EFRU) has been established by Maltese volunteers aiming to provide an unit of organised and fully trained rescuers to assist public authorities in the event of disasters such as earthquakes, airplane crashes, floods and similar occurrences.

¹⁶⁷⁷ <https://afm.gov.mt/en/forcestructure/afmunits/evrf/Pages/evrf.aspx>

¹⁶⁷⁸ <http://www.usar-spiders.com/?m=gallery>

¹⁶⁷⁹ <http://www.redcross.org.mt/aboutus.php>

Other volunteer organisations are not totally focused on disaster management relevant activities, but often contribute also to the Maltese disaster management system. An example of that is the **Malta Amateur Radio League (MARL)**. MARL initiated as a representative body for Amateur Radio in Malta aiming in promoting a specific interest group. It has now developed into an Emergency Communication Team that sets up back-up communication facilities during major events in cooperation with the CP Department, to be used in the event of a major system failure.¹⁶⁸⁰

3.1.3 Private sector cooperation

The public authorities may rely on the private sector for support when dealing with emergencies. This is done in an informal basis and is mostly relevant for the areas where no or limited public sector capacity and knowledge exists, for example in case water carrier vehicles are needed. Sometimes the CP Department engages in framework agreements on the terms of recruitment of relevant private sector entities, however, in most cases there appears to be no need to do so, since the small size of the country allows to deal with emergency incidents with the standing informal agreements.

In any case, as described by the CP Act, the Incident Site Commander, the Director of the CP Department or the highest ranking official of the Rescue and Assistance Force has, according to his judgement, and if indispensably necessary for the operations relevant to emergency response, the power to order immediate requisition of any property necessary for the operations.

3.1.4 Lines of communication and command

The first line of contact in case of emergencies in Malta is the 112 system. This phone centre is operated by the Police who channels the requests to the relevant authorities depending on the characteristics of the reported emergency. In case of a crisis or threat of a crisis the call is diverted to the communication centre at the CP Department Headquarters. There also the civil protection operational control room is located, that takes over the coordination of the actions in response to the incident.

As mentioned by the CP Department staff, the employees of the CP communication centre are trained to follow an undocumented yet strict routine when receiving an emergency call for each different type of incident. This routine dictates which organisations, officials and other government departments need to be mobilised to respond to the emergency incident. Respectively the CP Department mobilises first its personnel from the nearest out of the 7 regional stations in Malta and Gozo to handle the incident, followed by appropriate reinforcements from the rest of the CP Department force if deemed necessary.

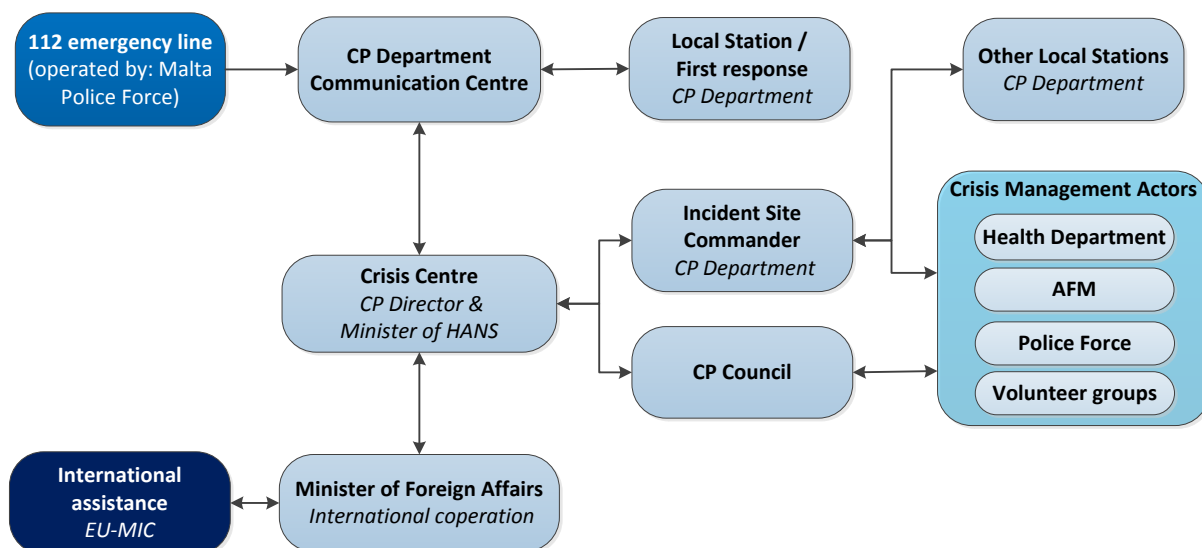
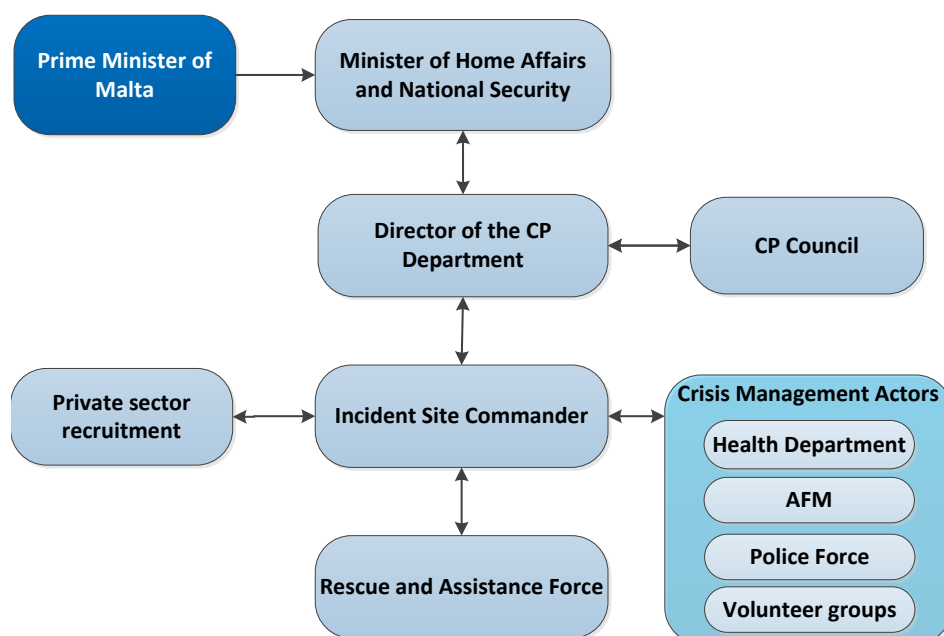
¹⁶⁸⁰ <http://www.9h1mrl.org/>

In case of more serious events, the CP Department Director informs the Minister of Home Affairs and National Security and the CP Council. The Minister in turn appoints, after consultation with the CP Council, the Incident Site Commander, who has control of the response effort. In turn the Incident Site Commander coordinates with the representatives of relevant public and private entities, volunteer groups and local councils on the best available means and manners to deal with the incident. The coordination of the response effort is performed from the control room of the CP Department in the Civil Protection centre. The representatives of the organisations in contact with the Incident Site Commander indicate to him their capacity to assist the efforts of the CP Department, as well as advice him based on their expertise during the incident response effort.

Based on these information, the volunteers are notified if needed to contribute in the response to emergencies, although usually, and due to the small size of the Maltese islands, they might be mobilised and present to the spot of the incident even before being notified by the CP Department. In the Maltese crisis management system, the AFM and the Police are the last to be called upon to support the response to the disaster.

Should the scale or type of the event call for bilateral cooperation, the Minister of Foreign Affairs gets involved and the bilateral coordination processes as set in international agreements are put in motion. On the other hand, if a domestic crisis escalates to the point that the Maltese disaster management system cannot handle it with its own capacity, then the Common Emergency Communication and Information System (CECIS)

European Civil Protection notification mechanism is activated as described in the following subsection. In these cases the Minister of Foreign affairs is involved in the coordination with the partner and assisting countries. Figure 3-4 and Figure 3-5 depict the described lines of command and command respectively during emergencies.

Figure 3-4: Lines of communication¹⁶⁸¹Figure 3-5: Lines of command¹⁶⁸²

3.2 Organisational cooperation

3.2.1 Domestic organisational cooperation

The coordination of the crisis management response effort at a national level is at the hands of the **Incident Site Commander** who is placed in charge of tackling a specific emergency incident. Operational cooperation between the organisations involved is performed at a national level, since this is the only level of crisis management in the Maltese system. The CP Council, where all involved

¹⁶⁸¹ Own design

¹⁶⁸² Own design

organisations are represented, coordinates with the Incident Site Commander regarding the strategic and operational design of the emergency response and the role of the specific organisations in that.

A major aspect of the Maltese crisis management system reported by the CP Department to influence the efficiency of its performance is the fact that the availability of only one level of crisis management reduces the operational decision-making flexibility. Even in case of local only minor emergency incidents, a whole government mechanism needs to be mobilised. On the other hand, the small size of the crisis management system and the country overall, facilitates communication as most of the actors involved know each other and it is easy to establish and functionally maintain informal communication norms.

3.2.2 Cooperation with foreign countries

Forming part of a wider European network of civil protection, the CP Department is committed to provide assistance to other EU Member States and third countries. This network facilitates the solidarity process that exists between Member States to assist any particular EU country affected by a disaster. Moreover Malta participates in a number of regional arrangements for mutual crisis management support. Malta is a member to the Regional Environmental Centre for Central and Eastern Europe (REC), of the Programme for the Prevention Preparedness and Response to Natural and Man-Made Disasters (PPRD-South), of the Euro-Mediterranean Partnership (EUROMED) and of the EUR-OPA Major Hazards Agreement.

However the country is more active in international support, through its participation in the EU's Civil Protection Mechanism. When emergencies appear, the Emergency Response Coordination Centre (ERCC) is activated to forward to an European network of national contact points the request for assistance of the affected Member State.

In order to file a request for assistance on behalf of Malta, this decision is made at a minister level and the CP Director notifies the ERCC system to inform the other Member States. The ERCC is one of the main means utilised to facilitate international humanitarian assistance to any struck country.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The CP Department reports that the different organisations and departments involved in the provision of crisis management services in Malta make all use of their own internal guidelines and SOPs to regulate their work and responses to crisis events. SOPs exist for all organisations and for the incident types each organisation is involved at. The SOPs are perceived as a document describing the exact procedure of the developed practice of response to each type of disaster. Although the level of detail of these documents may vary between organisations, they are perceived by employees as being detailed enough to avoid confusion or misinterpretations.

Although these documents are not available to the public, there is an established practice of exchanging SOPs between the organisations of the crisis management system in order to exchange views and provide mutual suggestions for improvement, while aligning them for better cooperation. A most elaborate cooperation in exchanging and co-developing SOPs is reported to exist between the CP Department and the Health Department, while the AFM and the Police are more reluctant to share their exact procedures. Similar to this approach of SOP exchange is what happens in case of cooperation with voluntary units. Overall, this is considered to enhance the robustness of the operational communications and understanding. These SOPs are tested annually in the joint exercises performed between public and private sector organisations of the crisis management system.

4.2 Operations planning

There are no operations strategic plans developed for Malta. Probably due to the very rare occurrence of high impact accidents, the CP Department reports that it relies mostly on the SOPs and the higher level master plan for civil protection.

4.3 Logistics support in crises

In principal the CP Department conducts the necessary logistics for its operations using its own means. Additionally the assisting volunteer groups provide their own vehicle and equipment. In case the existing equipment does not suffice for tackling the crisis event, the CP Department may request other government departments to provide logistical support to the best of their capacity. Two of the most significant public-sector contributors to the CP Department are the AFM, for provision of transportation services and the Cleansing Directorate contributing significantly to removing heavy obstacles like heavy plants that may fall on the roads surface and block traffic.

Support from the private sector is also relevant and has happened occasionally, but is mainly restricted to specialised fields where the government has little or no background. Such is the case for example when heavy vehicles and cranes might not be available in sufficient quantities.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

In the past, the notification of public was done through specific announcements broadcasted by the television and the radio and additionally press releases where issued. Nowadays, the CP Department has been equipped with an automated platform that generates notifications to the public through national public and private TV and radio channels. The existing perception in the CP department, the general public is informed fast enough regarding an existing threat.

A trial with an SMS platform for notifying the general public was abandoned as there were problems encountered with the proper functioning of the server used. Nevertheless, according to the CP Department, automated SMS notifications are the case for informing volunteers and staff out of duty at the moment.

Regarding international cooperation, the systems of the European Civil Protection Mechanism:

ECURIE and MIC/CECIS systems were used to obtain early warnings and achieve situational awareness for operations. The later has been now replaced by the ERCC. During an emergency, a mobile control unit from the civil protection is on site and all emergency entities are controlled from it. Additionally, a back-up communication system is set up during events and exercises by the MARL-emergency communication team – a volunteer group of radio amateurs.

5 Capabilities

5.1 Human resources

Overall, there is a very limited number of human resources devoted to civil protection by public authorities. According to information from the CP Department, with a few more than 110 permanent staff members, the Rescue and Assistance Force of the CP Department is expected to respond to a large variety of types of accidents whether occurring on land or at sea. At the same time, the CP Department with an overall headcount of 180 permanent personnel needs to cope with providing training and exercises for preparedness and taking on also a large part of the relief effort and manage humanitarian aid. In their efforts they are supplemented by the permanent staff of the other governmental departments involved in the crisis management system, who however have a broader remit that just providing crisis management services.

At the same time, the limited size of both the system and the country make mobilisation of personnel a relatively easy task. Staff members are notified, when off service, via SMS (as mentioned in section 4.4) if needed to participate in the crisis management effort and there have been no reported problems in the that direction according to the CP Department.

As the public sector capacity to provide sufficient preparedness, respond, and recovery and relief capacity is limited; the contribution of the volunteer sector is of great significance for the crisis management system. With a total capacity of mobilising 300 of their own members (110 of which within the SPIDER team of the CP Department), the volunteer organisations provide additional capacity in activities such as first aid SAR (in urban areas, land or sea) and humanitarian aid. Additionally NGOs (such as the Red Cross and SPIDER) are major contributors of emergency training to the general public as well as to their own personnel assisting in the preparedness of the system.¹⁶⁸³

Finally, the CP Department reported on the contribution received from the private sector to the human resources mobilised in emergency events is rather limited, mostly restricted to the specialised machinery and vehicle users, when such resources are obtained from the private sector.

5.2 Materiel (non-financial) resources¹⁶⁸⁴

According to the CP Department, each of the involved organisations is responsible for maintaining their own material resources. The CP Department stores the specialised equipment used by its personnel in the 6 local stations and the headquarters of the organisation (see Figure 5-1). This includes specialised equipment for (urban) SAR as well as chemical suits, helmets and other protective cloths to deal with al kind of emergency situations.

¹⁶⁸³

<https://www.gov.mt/en/Services-And-Information/Business-Areas/Law%20Enforcement/Pages/Community-Involvement-in-Malta.aspx>.

¹⁶⁸⁴ This section is based on the interview conducted with the CP Department of Malta.

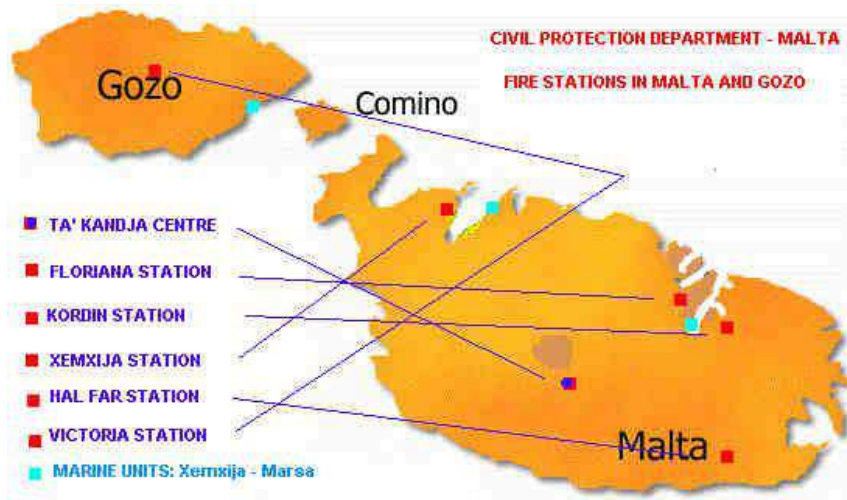


Figure 5-1: The Civil Protection Department local stations in Malta and Gozo¹⁶⁸⁵

The other public organisations involved in the crisis management system are responsible of maintaining their own equipment for disaster response. The AFM as well as the Health Department and the Transport Malta authority hold the relevant specialised equipment for dealing with emergencies in their sphere of competence. Especially relevant are the sea SAR (Search and Rescue) equipment of the AFM comprising of two SAR launches (Melita I and Melita II – see Figure 5-2). These are equipped at the Maltese Government's request also with a small fire-fighting pump to extinguish fires on speed boats, cabin cruisers and small yachts. Additionally the Cleansing department provides specialised heavy machinery and heavy vehicles, when necessary to complement the crisis management effort and remove heavy obstacles (such as large plants from the road or debris) on request. While any additional specialised machinery that may be needed is recruited from the private sector in the case of an emergency.



Figure 5-2: SAR vessel of the AFM¹⁶⁸⁶

¹⁶⁸⁵ <http://steno.webs.com/112/cpd/cpdorg.htm>

¹⁶⁸⁶ <http://afm.gov.mt/en/equipment/maritimevessels/sarmelita/Pages/melitai-ii.aspx>

Similar to the public authorities, the NGOs involved in crisis management procure and maintain their own necessary equipment consisting mainly of land and sea SAR, first aid equipment and personnel transport vehicles. The St. John Rescue team can also mobilise two Fire trucks while the Red Cross, except for the ambulances it can make available, is currently converting an old bus into a mobile clinic, capable of hospitalising 6 patients at the same time. Moreover, the MARL makes available emergency communication equipment in case the standard system fails.

However no central register of the combined available material resources exists and especially considering the equipment of the AFM, there is very limited information provided to the other actors of the system before the outbreak of a disaster incident.

As far as humanitarian aid and other important stocks necessary for the post-disaster relief effort for the general population is concerned, the CP Department maintains the main reserve stock in its headquarters in Ta' Kandja. This stockpile consists of all basic provisions for humanitarian aid such fuel, food, tents, blankets, etc. while medicine-related stocks are kept by the Health Department. Additional stockpiles are kept by the NGOs which contribute to the collection, maintenance and provision of humanitarian aid with their own resources.



Figure 5-3: humanitarian aid collection by EFRU volunteers¹⁶⁸⁷

5.3 Training

One of the main objectives of the CP Department is to organise training courses and exercises in fire-fighting, basic rescue and first aid for its own personnel, but also for the civil forces involved in crisis management and emergency response. For that reason, the CP Department maintains one training centre where, except training their own personnel, courses are provided to company and governmental personnel responsible for safety and security.

Once a year exercises take place involving all emergency-related entities. The guidelines used for planning the exercises are based on past experience, possible scenarios and training experience

¹⁶⁸⁷ http://www.efru.org/?page_id=887

gained from personnel deployed to EU and international exercises according to EU guidelines. Table top exercises and field exercises are held before every full-scale exercise.

Additionally, the CP Department reported that it supervises the exercises held once every 2 years in industrial sites as part of their obligation. There an annual schedule of exercises prepared and enterprises are notified 3 months in advance of their obligation to prepare for the exercise.

The volunteer organisations and NGOs provide training to their own personnel in accordance to their competence building needs, while also providing first aid and emergency response trainings to the general public. Trainings for both the government and volunteer organisations also take place under the EU framework for civil protection as well as under the bilateral cooperation agreements with specific countries as mentioned in earlier examples. Within the EU, amongst the objectives of these training exercises is to test the interoperability techniques among agencies in event of disasters.

Moreover, the volunteer organisations mobilise their own networks to train their personnel in international best practices. An example of this is the training provided by the Bulgarian and Spanish Red Cross section to the Malta branch to assist it in the building of competence in the field of maritime research and rescue or the training of the SPIDER team in urban SAR by the German THW.



Figure 5-4: Malta Red Cross training in water rescue¹⁶⁸⁸

¹⁶⁸⁸ <http://www.timesofmalta.com/articles/view/20120930/business-news/Malta-Red-Cross-invests-in-volunteer-training.439029>

5.4 Procurement

5.4.1 Procurement regulation

European regulations

The procurement of public contracts needs to be in line with the principles of European treaties and especially with the free movement of goods services, capital and people. Furthermore the procurement needs to comply with the principles of equality, proportionality etc. For some types of procurement additional regulations are codified in directives. Within the European legislation, three different procurement directives apply. These directives are mutually exclusive meaning only one of the directives apply to the public procurement. Directive 2014/25/EU (on procurement of utilities) and directive 2009/81/EC (on procurement in the defence and security industry) are topic specific. If these specific directives do not apply, public sector directive 2014/24/EU is applicable, which is the replacement of directive 2004/18/EC. The aim of the new directive is to simplify the rules on public procurement; improve the participation of SMEs and stimulate cross border joint procurement.

Stimulation of cross border joint procurement is helpful in case of a major internal crisis or a cross border crisis. The directive states in the preamble that contracting authorities should be able to choose to jointly provide their public services in cooperation with other authorities, without being obliged to use any legal form. These services don't have to be identical. The cooperation does not require all participating authorities to fulfil the obligations of the contract, as long as there is a commitment to contribute to the cooperative performance. The preamble points out that there are difficulties in cross border joint procurement. Therefore new rules have to be made. In these rules, the conditions for cross border procurement have to be clarified, as well as the applicable regulations. In addition, contracting authorities should be able to set up joint entities established under national or EU law. The new rules are specified in article 39 of the regulations.

If the procurement is executed by a centralised purchasing body located in another MS, the procurement shall be conducted in accordance with the national regulations of the MS where the purchasing body is located. In addition, several contracting authorities from different MS may jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system. Participating contracting authorities will then conclude an agreement that determines all responsibilities of the parties and the internal organisation of the procedure. As said before, the contracting authorities can set up a joint entity. The parties shall decide on the applicable rules on procurement. They can choose the rules of the MS where the entity has its registered office or where the entity carries out its activities.

This project evolves around the procurement related to crisis management, for example the procurement of ambulances, emergency packs or trainings. The utilities directive applies to gas and heat, electricity, water, transport services, ports and airports and postal services (article 8-13). The directive on defence and security applies to supply of military equipment and sensitive supplies. The majority of procurement in crisis management will be procured by normal NCCs and local authorities like the fire department or police and will not be secret. So in most cases the Public Sector Directive (2014/24/EU) is applicable. This chapter will therefore focus on this directive. It is worth keeping in mind that the other directives can also be applicable, for example if the army is used to solve a major

crisis. The directive is addressed to Member States and has no direct effect on the national regulations. The directive needs to be implemented first.

Scope of the Public Sector Directive

The Public Sector Directive applies to procurement by contracting authorities with respect to public contracts as well as design contests whose value is estimated to be not less than (article 4):

- € 5.186.000 for public works contracts;
- € 134.000 for public supply and service contracts and design contests, awarded by central government;
- € 207.000 for public supply and service contracts or design contests awarded by sub-central contracting authorities.
- € 750.000 for public service contracts for social and other specific services listed in Annex XIV.

This directive should not apply to certain emergency services where they are performed by non-profit organisations or associations, since the particular nature of those organisations would be difficult to preserve if the service providers had to be chosen in accordance with the procedures of the directive. Furthermore the directive does not apply to public contracts with the purpose of providing public communication networks or electronic communication services; public contracts organised pursuant to international rules; several types of service contracts, e.g. rental, legal services and employment contracts and service contracts based on exclusive rights; and last, public contracts between entities within the public sector (articles 8-12).

Award procedures

On a European level, procurement is executed by the European Commission. The Public Sector Directive provides the provisions for several award procedures:

- open procedure,
- restricted procedure,
- competitive procedure with negotiation,
- competitive dialogue,
- negotiated procedure without prior publication.

The *open procedure* applies when no other procedure is chosen. In the open procedure, the contracting authority submits a call for tenders. Interested companies may submit a tender. The best offer is chosen, based on the selected award criteria (article 27).

The *restricted procedure* consist of two phases. In the first phase a call for expression of interests is set out. Interest candidates may submit an invitation to tender. The contracting authority will then invite the most suitable candidates to submit a tender. The contracting authority will award the contract to the best tender, based on the selected award criteria (article 28).

In the *competitive procedure* with negotiation any interested candidate may submit a request to participate in the negotiations, in response to a call for competition. In this call for competition, the contracting authority has provided a description of their needs and the characteristics of the works

or services to be procured. Only the interested candidates that are invited may submit an initial tender, which will be the basis of the negotiations (article 29). In several cases the negotiation procedure can be used without prior publication, for example when the public contract contains a creative achievement; when there is no competition; when intellectual property rights need to be protected, or when there are reasons for extreme urgency (article 32).

In the *competitive dialogue* any interested candidate can submit a request to participate in response to a contract notice given by the contracting authority. The contract notice provides the information on and the needs and requirements of the contracting authority, as well as the chosen award criteria. The selected interested candidates will join the competitive dialogue, in which the means best suited for satisfying the contract will be defined (article 30).

A new procedure within this directive is the *innovation partnership*. In this procedure, any economic operator may submit a request to participate in response to a contract notice, by providing information for qualitative selection that is requested by the contracting authority. The innovation partnership can be set up with one partner or several partners. Only the economic operators invited by the contracting authority participate in the procedure. After each phase, the contracting authority may decide after each phase to terminate the partnership or reduce the number of partners within the partnership, based on the targets.

According to article 26, the open procedure and restricted procedure are the standard procedures to apply in case of procurement. The other procedures can be used in a limited number of situations, for example when the service is innovative, or when the technical specifications cannot be determined (art. 26, sub 4.). Contracting authorities can use framework agreements, provided that they apply the procedures in this directive. The agreement can not exceed four years. Contracts within the agreement will be awarded according to the rules in article 33.

In most procedures the candidates are chosen with the use of selection criteria. The selection criteria may relate to suitability to pursue the professional activity; economic and financial standing and technical and professional ability. All criteria need to be related and proportionate to the matter of the contract (article 58).

National regulations

In Malta, there are two regulations regarding the procurement of goods and services: Public Procurement Regulations (Legal Notice 296 of 2010, as amended by Legal Notices 47, 104, 255 and 312 of 2012, 65 and 397 of 2013, and 55, 132, 293 of 2014) and the Public Procurement of Entities operating in the Water Energy, Transport and Postal services Sectors Regulation (Legal Notice 178 of 2005). Malta has not implemented the new directive of the EU yet. For the public procurement of goods and services related to crisis management, most the time, the first regulation applies.

Scope

The regulation applies to public contracts, which is defined as: ‘ any contract for pecuniary interest concluded in writing between one or more economic operators and one or more contracting authorities and having as their object the execution of works, the supply of products or the provision of services as defined in this regulation.

Some of these contracts are excluded from these regulations, for example public contracts awarded pursuant of an international agreement; public contracts which are secret, which are about telecommunication or arbitration and so on. The extensive list can be found in article 17. The regulation has no threshold value from which the regulations apply. However, different rules apply based on the value of the contract.

5.4.2 Procurement Procedures

In Malta, procurement is executed by the central government and all the ministries. Within the ministries, the different agencies are authorized for procurement. The extensive list of all authorized contracting authorities is published in Schedule I of the Public Procurement regulations.

In general, the contracting authority shall ensure that there is no discrimination between economic operators and that all operators are treated equally and transparently. The confidential nature of all information of economic operators needs to be respected. The specific award procedures depend on the value of the contract. When the contract has an estimated value less than € 120.000, the contract is subject to Part II of the regulation. If the estimated value exceeds € 120.000 but is below the European threshold, Part III and Part IV of the regulations apply. Finally, if the estimated value exceeds the European threshold, Parts IV, V VI (A-C) and VII are applicable (article 15). These provision are further presented below.

Procurement of a public contract below € 120.000.

The procurement procedure depends on the value of the public contract. Public contracts with a value below € 2.500 may be procured at a department level either after obtaining quotations or directly from the open market. Contracts with a value between € 2.500 and € 6.500 may be procured departmentally after a call for tenders, after obtaining quotations or direct from the open market. The total estimated value of these two categories cannot exceed € 25.000 within six months. The last category within Part II is contracts with an estimated value between € 6.000 and €120.000. They may be procured after a departmental call for tenders, or after publishing a call for quotations in the Gazette (article 20). The restricted procedure can only be used with prior consent of the Director of Contracts and is open to international participation.

Procurement of a public contract with a value between € 120.000 and the European thresholds.

In case of a contract with a value between € 120.000 and the European threshold, Part III and IV apply to the procurement procedures. All public contracts with this value shall be subject to regulatory and other functions of the Department and Director of Contracts. In some cases the Department of contracts shall act on behalf of the contracting authority.

According to Part IV, the standard award procedures applicable to these public contracts are the open procure or the restricted procedure. Only in specific circumstances, stated in article 48, the

competitive dialogue can be used. This procedure will be explained in the next paragraph. The negotiated procedure after prior publication can be used in case of irregular tenders, exceptional cases when the nature of the services or the risk involved do not permit prior overall pricing; when the nature of the procurement is such that contract specifications cannot be established (article 59, 66 & 72). The negotiated procedure without prior publication can be used: when no suitable tender is submitted; when the service can only be provided by a single operator; when the time-limits of the other procedures cannot be respected for reasons of extreme urgency etc. (article 60, 67 & 73). A last possibility for procurement is the use of the framework agreement (article 26), which is in line with the European directives.

Contracts will be awarded according the selection criteria codified in the regulations. These criteria are the most economically advantageous offer or the lowest price offered, compliant with the tender specifications (article 28). When the award is made to the economically most advantageous offer, the following criteria are taken into consideration: price, delivery date and period, running costs, costs effectiveness, quality etc. The criteria the contracting authority intends to apply in the determination of the award, including the relative weight of each criteria, need to be indicated.

Procurement of public contracts with a value exceeding the European threshold

The procedures explained in the previous paragraph also applies to procurement of public contracts with a value exceeding the European threshold. These contracts shall be awarded using the open procedure, the restricted procedure, or in the exceptional cases mentioned above, the negotiated procedure (article 37). In case of particularly complex contracts, where the use of open or restricted procedure will not allow the award of the contract, the competitive dialogue alternative can be used (article 48). The aim of the dialogue is to identify and define the means best suited to satisfy the needs of the contracting authority. The solution offered by participants other than the winning party as well as other confidential information cannot be revealed. The dialogue will continue until the contracting authority can identify the proposals capable of meeting their needs. The contracting authority shall indicate the objective and non-discriminatory criteria they intend to apply. Then, the participants will submit their final tenders, based on the solutions presented. The contract will be awarded to most economically advantageous tender. The selection criteria for awarding the contract then are the same as in the previous section.

Procurement in practice

In practice, while the procurement is relatively easy when smaller amounts (up to €6.500) are concerned, for larger amounts there are strict protocols that apply and the procurement process might take very long to conclude.

Initially, the Director of the CP Department needs to indicate to the supervising Ministry of Home Affairs and National Security the need for procurement. Then depending on the Ministry's approval, a request for funding is send to the Ministry of Finance, while the CP Department needs to notify the Ministry of Finance as well and reason the application. At this point the procedure is split into the two directions that might be followed.

Should the CP Department have sufficient funds for the procurement, then the approval is easy to get and a tender is prepared and issued. Otherwise, the process is dependent on the Ministry's decision to fund the procurement. Usually a request is filed for EU contribution through the Structural funds, when the request regards large amounts. In any case the application as prepared by the CP Department has to be approved from the Ministry of Finance. Practice shows that the EU procedure may be 2 months longer than when procurement is done based on national funds.

Finally, cross-border procurement is not a vehicle used often (or preferred) by the Maltese authorities. This need has seldom occurred to the CP Department.

5.5 Niche capabilities

Due to its small size and location at one of the safest countries, the Malta crisis management system has had little room to gain experience in major disaster events. The Maltese crisis management system managed to cope without international help, with a profound influx in size (compared to the size of the country) influx of refugees during the Libyan crisis. This event strained the Maltese systems to its limits. The crisis was eventually managed with a significant support from the volunteer sector.

Resources

Legislative acts

- Civil Protection Act, Act XV of 1999 from 01.12.1999
- Data Protection Act, Act XXVI of 2001 as amended by Acts XXXI of 2002 and IX of 2003; Legal Notices 181 and 186 of 2006, 426 of 2007; Acts XVI of 2008 and XXV of 2012; and Legal Notice 426 of 2012
- Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks Text with EEA relevance, Official Journal L 288, 06.11.2007, 27-34.
- Council Decision 2007/779/EC/Euratom of 8 November 2007 establishing a Community Civil Protection Mechanism; and
- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations.
- Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC.
- Directive 2014/24/EU of the European Parliament and of the council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.
- Emergency Powers Act, Act VIII of 1963 as amended by Legal Notice 46 of 1965 and Act LVIII of 1974
- Malta Armed Forces Act, Act XXVII of 1970, as amended by: Acts XXXV and LVIII of 1974, XIII of 1975; Legal Notice 148 of 1975; Acts XVIII and XXII of 1976, XI of 1977, XX of 1980, XIII of 1983, VIII of 1990, XV of 1990, XXIV of 1995, and X and XII of 2000; Legal Notice 411 of 2007; and Acts XIII, XXVI of 2014 and IV of 2015
- Public procurement regulations: LEGAL NOTICE 296 of 2010, as amended by Legal Notices 47, 104, 255 and 312 of 2012, 65 and 397 of 2013, and 55, 132, 293 of 2014.
- Voluntary Organisations Act, Act XXII of 2007, as amended by Legal Notices 427 of 2007 and 177 of 2012

Official documents (white papers, strategies, etc.)

Malta Resources Authority (MRA), Preliminary Flood Risk Assessment (PFRA), Final report, 2013

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Expert interviews

Civil Protection Department of Malta, November 2014.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

THE NETHERLANDS

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Linette de Swart and Rachel Beerman)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The **crisis management structure** in the Netherlands is complex. The operational side is organised locally and so the local fire brigade, police force and medical team are the first responders to a crisis. These emergency response services fall under the responsibility of the different Security Regions, which form the back bone of the Dutch crisis management system. The Security Regions the local crisis plan are responsible for organising trainings and exercises and formulating adequate (response) policies.

On the national level a distinction between the general crisis management system (the so-called general chain) and the specific crisis management system (the so-called functional chain) can be made. For each crisis in the general chain (affecting the public order and safety) the Ministry of Security and Justice will be the main responsible ministry. If only the public order and safety are affected, the Ministry of Security and Justice is the sole responsible ministry. If the crisis affects more than the public order and safety, the functional chain(s) will become active as well. Depending on the type of crisis, the ministry responsible for this task becomes the main responsible ministry, supported by the Ministry of Security and Justice. Besides the official actors, **many other stakeholders** can play a role. The role of the Dutch Red Cross is explicitly laid down in the law, but also with the vital partners (e.g. energy companies, telecom and drinking water suppliers), covenants have been concluded laying down their part in crisis management.

If an **international disaster** happens, the main responsible ministry is the Ministry of Foreign Affairs. The Ministry will decide on the appropriate action to be taken. Decisions are made in cooperation with the National Coordination Centre (NCC), other Ministries, Embassies and international organisations. To file a request for **humanitarian aid** the NCC is the competent authority. To this end, the NCC will start the procedure, evaluating whether or not the Netherlands is able to provide the support needed and/or requested. Often, the NCC will also contact the Ministry of Foreign Affairs in order to jointly decide upon the request.

Financing preparedness is a responsibility predominantly of the Ministry of Security and Justice. Although it is difficult to find the exact amount spend on crisis management, it is estimated that this Ministry spends around € 238 million per year on crisis management. In addition to these contributions of the Ministry, the municipalities need to contribute to preparedness. In 2013 they spend approximately € 1 billion. **Financing recovery** is done both by the governments and the private sector. The **main niche capability** of the Netherlands that could be of interest for EU crisis management is the country's experience with flood response and water management. Since the Dutch Watersnood flood in 1953, the Netherlands has developed an extensive prevention program which is applied on a global scale. Similarly, Dutch flood experts are active all around the world to provide guidance on flood prevention.

Table of Contents

THE NETHERLANDS Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1172
Overview	1173
Table of Contents	1174
List of Figures	1177
List of Tables.....	1177
List of Abbreviations.....	1178
1 Policy	1180
1.1 Risk Assessment.....	1181
1.1.1 Key risks and former disasters	1181
1.1.2 Risk assessment methodology	1184
1.2 Policy and Governance	1186
1.2.1 Strategy scope and focus	1186
1.2.2 Monitoring and analytical support to policy making; R&D	1187
1.2.3 Policy for Prevention and preparedness	1188
1.2.4 Policy for Preparedness	1190
1.2.5 Policy for Response	1190
1.2.6 Policy for Relief and Recovery	1191
1.3 Financing.....	1192
1.3.1 Investing in preparedness	1192
1.3.2 Investing in consequence management	1196
1.4 Policy review, Evaluation & Organisational Learning	1197
1.4.1 Post-Disaster Assessment	1197
1.4.2 Departmental Lessons Learned systems	1198
1.4.3 Centralised (national) Lessons Learned system	1199
1.4.4 International exchange for Lessons Learned	1199
1.4.5 Regular policy reviews	1200
1.5 Resilience	1200
1.6 Information sharing and data protection	1201
2 Legislation	1203
2.1 Crisis (emergency, disaster) management concept.....	1203
2.2 General crisis (emergency, disaster) management law.....	1204
2.3 Emergency rule	1206

2.3.1	Emergency powers on national level	1206
2.3.2	Emergency powers for mayors and heads of Security Regions	1207
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1208
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1209
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1210
2.7	Legal regulations for international engagements of first responders and crisis managers	1211
3	Organisation.....	1213
3.1	Organisational chart.....	1213
3.1.1	General chain: violence of public order or safety	1214
3.1.2	Functional chain: specific crisis	1215
3.1.3	Coordination between the chains	1216
3.2	Organisational cooperation	1218
4	Procedures	1222
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1222
4.2	Operations planning	1224
4.2.1	National crisis plans	1224
4.2.2	Departmental crisis plans	1225
4.2.3	Regional / Local crisis plans	1225
4.3	Logistics support in crises	1226
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1227
4.4.1	Crisis communication	1227
4.4.2	Public information and warnings	1228
4.4.3	Alert systems	1228
5	Capabilities.....	1231
5.1	Human resources	1231
5.2	Materiel (non-financial) resources	1232
5.3	Training	1234
5.3.1	Exercises for crisis management	1234
5.3.2	Centralised training in crisis management	1235
5.3.3	Training of volunteers	1236
5.4	Procurement	1237
5.4.1	European regulations	1237
5.4.2	<i>National</i> regulations	1239

5.5 Niche capabilities	1241
Resources	1243
Legislative acts	1243
Other normative acts	1244
Official documents (white papers, strategies, etc.)	1245
Online resources (e.g. websites of key CM organizations)	1246
Publications	1246
Expert interviews	1247

List of Figures

<i>Figure 1.1: Risk assessment diagram 2012</i>	<i>1186</i>
<i>Figure 1.2: Developments crisis management and emergency response</i>	<i>1194</i>
<i>Figure 2.1: Overview map of relations between the different actors.....</i>	<i>1209</i>
<i>Figure 3.1: Location of the 25 Security Regions in the Netherlands.....</i>	<i>1213</i>
<i>Figure 3.2: Organisation chart of general crisis management in the Netherlands</i>	<i>1214</i>
<i>Figure 3.3: Organisational chart of complex crisis management in the Netherlands.....</i>	<i>1216</i>
<i>Figure 3.4: National crisis management and its actors in the Netherlands</i>	<i>1217</i>
<i>Figure 3.5: Decision making process to offer international support if requested</i>	<i>1220</i>
<i>Figure 4.1: Example of a request form got military assistance</i>	<i>1223</i>
<i>Figure 4.2: Screen shot of the NL-alert website</i>	<i>1230</i>
<i>Figure 5.1: Steps in the OTOTEL cycle</i>	<i>1236</i>
<i>Figure 5.2: Impression of the works in the Easter Schelde (left) and the Maeslandkering (right)</i>	<i>1241</i>
<i>Figure 5.3: Location of all measures taken in the Delta Programme (red lines)</i>	<i>1242</i>

List of Tables

<i>Table 1.1: Percentage of people fearing a certain incident between 2012-2014</i>	<i>1180</i>
<i>Table 1.2: Comparison of risk per category between the Netherlands and neighbouring countries</i>	<i>1182</i>
<i>Table 1.3: Crisis in the Netherlands between 2000-2014.....</i>	<i>1183</i>
<i>Table 1.4: Largest natural disasters between 1900-2014, measured in economical impact.....</i>	<i>1183</i>
<i>Table 1.5: Largest technological disasters between 1900-2014, measured in economical impact</i>	<i>1184</i>
<i>Table 1.6: Overview of critical sectors and products in the Dutch vital infrastructure system</i>	<i>1189</i>
<i>Table 1.7: Expenses of municipalities for fire brigades and crisis management (2005-2012)</i>	<i>1193</i>
<i>Table 1.8: Estimated budget for the National Police, x1000.....</i>	<i>1194</i>
<i>Table 1.9: Estimated budget for crisis management related activities, x1000</i>	<i>1195</i>
<i>Table 1.10: Penetration rate and GVA contribution per sector (2011)</i>	<i>1196</i>
<i>Table 2.1: Summary table is presented, showing the main information.....</i>	<i>1208</i>
<i>Table 2.2: Example of damages to be claimed by voluntary fire fighters in Rotterdam (2012).....</i>	<i>1210</i>
<i>Table 3.1: Overview of functional chain maps in the Netherlands.....</i>	<i>1215</i>
<i>Table 5.1: Large private industry players to involve in crisis.....</i>	<i>1231</i>

List of Abbreviations

AT	Advisory Team (Adviesteam)
BDUR	Block grants disasters (Brede Doeluitkering Rampen)
CAR-UWO	College of Employment matters (College voor Arbeidszaken)
CdK	Commissioner of the King
CMBA	Covenant Civil-Military Administrative Agreements (Civiele-Militaire Bestuursafspraken)
CRED	Centre for Research of the Epidemiology of Disaster
DCC	Departmental (crisis) Coordination Centres
EC	European Commission
EOD	Explosive Ordeal Disposal teams
EU	European Union
EUDRCC	Euro-Atlantic Disaster Response Coordination Centre
EU-MIC	European Union Monitoring and Information Centre
GDP	Gross Domestic Product
GHOR	Organisation for medical assistance in the region (Geneeskundige Hulpverleningsorganisatie in de Regio)
GRIP	Coordinated Regional incident management procedure (Gecoördineerde Regionale Incidentbestrijdings Procedure)
GVA	Gross Value Added
ICCb	Interdepartmental Commission Crisis Management
ICMS	Improvement of the CivMil Cooperation (Intensivering van de Civiel-Militaire Samenwerking)
INSARAG	International Search and Rescue Advisory Group
LOCC	National Operational Coordination Centre (Landelijk Operationeel Coördinatiecentrum)
LOS	National Operational Staff (Landelijke Operationele Staf)
MCCb	Ministerial Commission Crisis
MOD	Ministry of Defence
MS	Member State
NAC	National Academy for Crisis management (Nationale Academie voor Crisisbeheersing)
NCC	National Coordination Centre
NCP	National Crisis Plan
NCTV	National Centre Terrorism and Security (Nationaal Coördinator Terrorismebestrijding en Veiligheid)
NKC	National Core team Crisis Communication (Nationaal kernteam Crisiscommunicatie)
NRB	National Risk Assessment (Nationale Risico Beoordeling)
OCHA	Office for the Coordination of Humanitarian Affairs

OTOTEL	Educate, Train, Practise, Test, Evaluate and Lesson's learned (Opleiden, Trainen, Oefenen, Teseten, Evalueren en Leren van less)
R&D	Research and Development
SBIR	Small Business Innovation Research Programme
SME	Small or Medium sized Enterprise
SOP	Standing Operating Procedure
UN	United Nations
UNDAC	United Nations Disaster Assessment and Coordination
USAR	Urban Search and Rescue

1 Policy

In the Netherlands three types of crises are distinguished: the national crisis, the regional crisis and the municipal crisis. Although Driver focuses on national crises, in the Dutch crisis management system it is difficult to differentiate between the three types as they can easily turn from one form of crisis into another. For example, a municipal crisis can easily turn into a regional crisis (e.g. the smoke of a local fire drifts to surrounding municipalities and thereby affects their citizens as well). The crises are defined as follows¹⁶⁸⁹:

- National crisis is an event
 - Which affects the national security, and
 - Where regular structures and/or resources no longer are sufficient in order to maintain stability.
- Regional crisis is an event:
 - Which causes a severe disruption of public order and safety and which affects more than one Security Region, and
 - Where regular structures and/or resources no longer are sufficient in order to maintain stability.
- Municipal crisis is an event:
 - Which causes a severe disruption of public order and safety and which affects only a Security Region or a municipality, and
 - Where regular structures and/or resources no longer are sufficient in order to maintain stability.

Twice a year the Dutch population is asked about their perception of 'feeling safe'. A randomly selected group is asked to participate in the Risk and Crisis barometer. The most recent one was carried out in June 2014. In this last barometer 816 Dutch people, all over the age of 15, were asked if they feared certain crisis or disasters. The table below shows which incidents were most feared by Dutch people¹⁶⁹⁰.

Table 1.1: Percentage of people fearing a certain incident between 2012-2014

	June 2014	November 2013	June 2013	November 2012	June 2012
Economic crisis	62%	64%	75%	76%	78%
International crisis	51%	43%	45%	50%	49%
Cyber attack ¹⁶⁹¹	49%	52%	58%	-	-
Terrorist attack	48%	43%	49%	38%	44%
Incident with dangerous goods	39%	40%	41%	47%	43%
Extreme weather conditions	39%	37%	33%	34%	33%

¹⁶⁸⁹ Source: Infopunt Veiligheid (2012)

¹⁶⁹⁰ Source: IPSOS (2014)

¹⁶⁹¹ This category was added since 2013.

	June 2014	November 2013	June 2013	November 2012	June 2012
Pandemic	36%	40%	42%	42%	41%
Disturbance in large crowd	35%	41%	47%	47%	45%
Traffic accident	35%	37%	36%	39%	40%
Large fire	30%	30%	31%	36%	37%
Nuclear incident	29%	30%	34%	31%	27%
Electricity, gas, water or phone failure	29%	32%	34%	31%	31%
Flooding	29%	32%	30%	30%	26%

Source: IPSOS (2014), edited by authors.

According to the Risk and Crisis Barometer an economic crisis is the most feared (62%), followed by an international crisis (51%). Striking is that most Dutch citizens do not fear flooding. Only 29% of the people indicated that they fear (severe) flooding, although this is one of the most severe risks the Netherlands is facing.

1.1 Risk Assessment

1.1.1 Key risks and former disasters

Based on its location the main natural risk identified for the Netherlands is a flood. The total area that is part of the Dutch jurisdiction is 41,543 km² of which 7,814 km² consists of sea. The total length of the coast line is 523 km. Of the remaining 33,729 km² (land use), 19% consists of internal waters, equalling 6,408 km². In total the country has 14,222 km² of water. On top of that 25% of the inhabited land lies below sea level. The largest parts of land below sea level are located in the West of the country, where also the four biggest cities are located. Especially, large parts of The Hague and Rotterdam are located below sea level. The total population of the Netherlands is estimated at 16, 8 million of which 7,1 live in the densest populated area (Randstad), and are at a constant risk of flooding¹⁶⁹².

Since the large flood of 1953 which killed 1863 Dutch people (2,395 in total), The Netherlands has a very strong focus on flooding prevention. One of the largest programmes introduced is the so-called 'Deltawerken programma'. For more information on this program, please refer to paragraph 5.5. In addition to the program the Netherlands is heavily investing in dyke maintenance and improvement throughout the whole country. Dyke investment is crucial for the protection of the Dutch population. In 2014 the Minister of Infrastructure and Environment promised to invest half a billion Euro per year to ensure the dykes are properly maintained and the risk on a severe flood can be reduced¹⁶⁹³.

¹⁶⁹² Source: European Commission, DG ECHO, Vademecum.

¹⁶⁹³ Source: <http://www.bnr.nl/nieuws/996322-1408/nederlandse-dijken-niet-op-orde-investeren-van-15-miljard>

Besides flooding other threats have been identified. The main threats categorized by their probability and impact are¹⁶⁹⁴:

- High probability, but low impact: several forms of extremism, large scale electricity black-out, extreme heat and dryness;
- High probability and substantial impact: Influenza pandemic, geopolitical oil crisis;
- Low probability, but high impact: flooding, targeted attack on electricity infrastructure.

A threat recently identified which has a considerable impact on Dutch society is a large-scale IT hazard.

In the World Risk Report 2014¹⁶⁹⁵ the Netherlands has a risk index of 8.25%, where risk is understood as the interaction between a natural disaster (earthquakes, floods, cyclones, droughts, sea level rise) and the vulnerability of the society. The Netherlands is ranked on the 51st place out of 171 countries (nr. 171 is facing the lowest risk). For each of the countries not only the overall risk, but also the exposition, vulnerability, susceptibility, lack of coping capabilities and lack of adaptive capacities have been assessed. In the separate list on exposition, the Netherlands is placed in the top-15 most exposed countries, ranked on the 12th place.

Table 1.2: Comparison of risk per category between the Netherlands and neighbouring countries

Rank	Country	World risk index	Exposition	Vulnerability	Susceptibility	Lack of coping capabilities	Lack of adaptive capacities
51	Netherlands	8.25%	30.57%	26.98%	14.84%	42.15%	23.96%
136	UK	3.54%	11.60%	30.49%	16.57%	47.08%	27.82%
139	Belgium	3.41%	11.66%	23.23%	15.59%	42.38%	29.70%
147	Germany	3.01%	11.41%	26.37%	15.41%	37.73%	25.97%
152	France	2.69%	9.25%	29.08%	16.13%	43.29%	27.83%

Source: Alliance Developments Work (2014), edited by authors.

In the table above the position of the Netherlands is compared to the situation of its neighbours. As the table shows the Netherlands has a much higher risk than Germany, Belgium, France and the UK. This higher risk is mainly caused by the high exposition the country faces. The report defines exposition as the exposition of a country towards natural hazards, such as earthquakes, cyclones, flooding, drought, and sea level rise. Especially flooding and sea level rise are major points of concern for the Netherlands due to its geographical location.

During the last fourteen years the following crises happened in the Netherlands, which can be divided in four categories; I) natural disasters and infectious diseases, II) industrial/transport accidents, III) infrastructure failures and IV) terrorism. For each of the crises the number of persons, killed, injured or affected, is indicated where possible¹⁶⁹⁶.

¹⁶⁹⁴ Source: European Commission, DG ECHO, Vademecum.

¹⁶⁹⁵ Source: Alliance Developments Work (2014)

¹⁶⁹⁶ Source: ANVIL, country study: The Netherlands (2013)

Table 1.3: Crisis in the Netherlands between 2000-2014¹⁶⁹⁷

Year/month	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of people affected
2012 Apr	Train crash	II	1		117
2011 Apr	Shooting at a mall	IV	6	17	
2011 Jan	Fire at chemical plant	II			?
2009 Apr	Start influenza H1N1 pandemic	I	62		
2009 Apr	Attack Royal family	IV	8	10	
2009 Feb	Airplane crash near Schiphol	II	9	86	
2007 Oct	Electricity breakdown (2 days) due to helicopter crash	III			100,000
2005 Nov	Electricity breakdown (2 Days)	III			25,000
2005 Apr	Fire at Schiphol Airport	I	11		15
2004 Oct	Assassination of Van Gogh	IV	1		
2001 May	Assassination of Fortuyn	IV	1		
2001 Jan	Café Fire on New Year's Eve	I	14		180
2000 May	Fireworks factory explosion in Enschede	II	22	1,000	3,000

Source: ANVIL, country study: The Netherlands (2013)

According to the Brussels based Centre for Research of the Epidemiology of Disasters (CRED), the most costly natural disaster in the Netherlands is a storm that caused a lot of damage in 1990. The number of flood cases by flooding in this list is limited, only two flooding have been reported, compared to seven storms. The table below shows the top-10 disasters since 1900, measured in their financial impact¹⁶⁹⁸.

Table 1.4: Largest natural disasters between 1900-2014, measured in economical impact

Type of disaster	Date	Damage (000US\$)
Storm	25 January 1990	1,200,000
Storm	21 January 1995	1,180,000
Storm	18 January 2007	550,000
Flood	12 September 1998	530,000

¹⁶⁹⁷ It should be noted that attacks by Animal liberation front, unclaimed attacks that have been prevented and heat/cold waves are excluded from this list.

¹⁶⁹⁸ Source: <http://emdat.be/>

Type of disaster	Date	Damage (000US\$)
Flood	31 January 1953	300,000
Storm	26 October 2002	300,000
Storm	3 February 1990	180,000
Storm	25 February 1990	180,000
Extreme temperature	25 November 2005	100,000
Storm	7 February 1990	70,000

Source: <http://emdat.be/>

CRED also collected data on technological disasters. The following table presents the major technological disasters since 1900, measured in their economic impact. As the table shows the largest economic damage result from industrial accidents (4 in total) and miscellaneous accidents (3 in total). In number of people killed or affected transport accidents are mainly dominating the top-10 (9 out of 10 for people killed and 7 out of 10 for people affected).

Table 1.5: Largest technological disasters between 1900-2014, measured in economical impact

Type of disaster	Date	Damage (000US\$)
Miscellaneous accident	13 May 2000	256,000
Industrial accident	7 January 1993	39,000
Industrial accident	13 December 1991	38,000
Industrial accident	25 February 1990	33,800
Miscellaneous accident	30 August 1993	31,000
Industrial accident	23 August 1990	28,300
Miscellaneous accident	12 August 1992	27,600

Source: <http://emdat.be/>

1.1.2 Risk assessment methodology

The methodology for the Dutch risk assessment is laid down in the guide book 'Working with scenario's, risk assessment and capacities'¹⁶⁹⁹. This guide book indicates how the national risk assessment (abbr. NRB) should be carried out and updated. The book also provides additional guidance for scenario development. The method is developed by a working group consisting of governmental experts, knowledge institutes and industry partners.

The risk assessment is updated once a year in order to have a good overview of possible threats and their respective impacts on Dutch society. The outcomes are laid down in the national risk

¹⁶⁹⁹ Source: Ministry of the Interior and Kingdom Relations (2009)

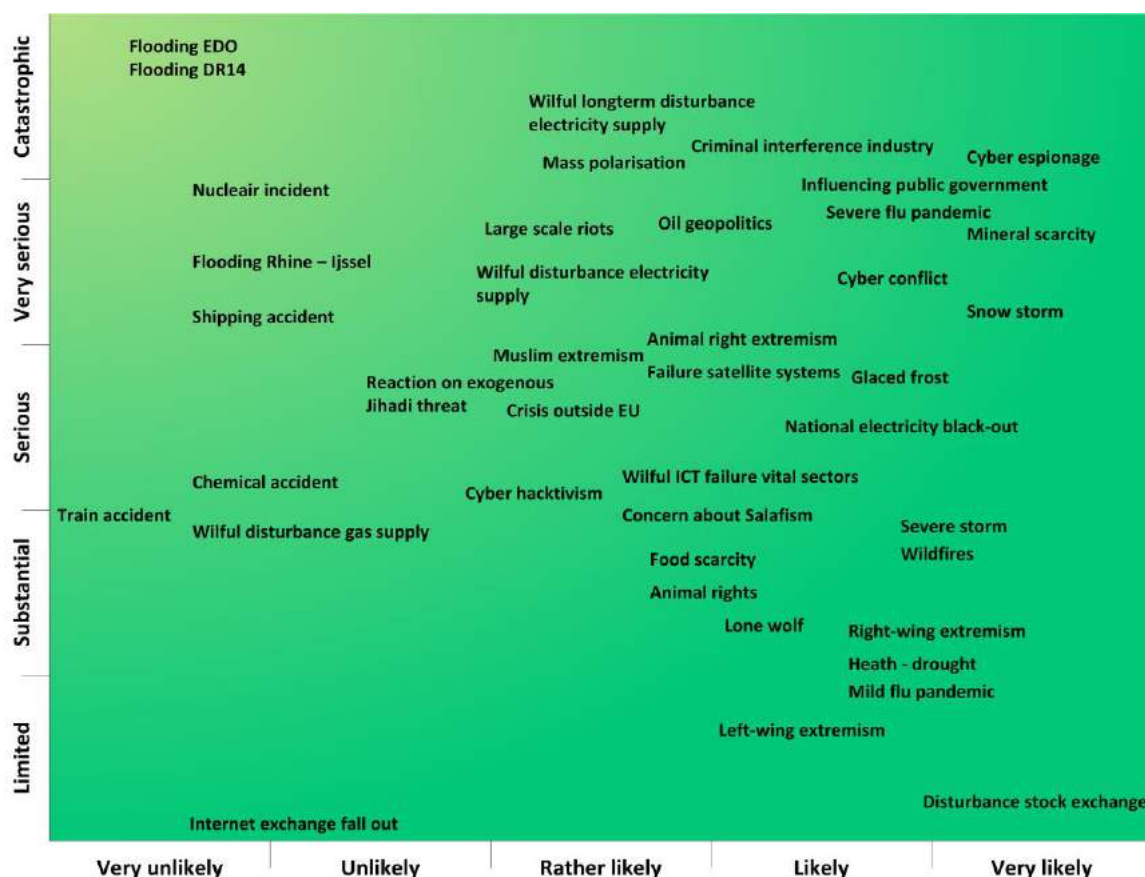
assessment ('Nationale risicobeoordeling') which is published on the website of the Ministry of Security and Justice¹⁷⁰⁰. In the risk assessment the following steps are followed:

- Starting point is the scenario development. Each scenario describes a specific threat, e.g. flooding, pandemics etc. The threats need to be described in a systematic way in order to increase the comparability between the threats.
- Secondly all descriptions are checked to see if the necessary information is included to ensure a good comparability between the threat scenarios on their impact and likeliness of occurrence.
- Based on the descriptions the impact of each scenario on Dutch society is assessed.
- After assessing the impact on Dutch society an assessment of the likeliness that a scenario will actually occur is carried out.
- Based on the impact and likeliness of a scenario the scenarios are brought together in a risk diagram (see description below). This diagram provides an overview of all risks, their impacts and likeliness as well as their mutual relationships.

In the risk assessment all scenarios developed are brought together in the risk assessment diagram. On the horizontal axis the scenarios are ranked by likeliness of occurrence. If a scenario is placed on the left hand side of the diagram it is quite unlikely that the scenario will occur, while scenarios placed on the right hand side will almost certainly arise. On the vertical axis the impact of the scenario on Dutch society is depicted. If a scenario is placed at the bottom the impact of the threat on Dutch society is limited, while scenarios located at the top are catastrophic. It should be noted that each scenario is assessed, on impact and likeliness, relatively to the other scenarios.

Based on this diagram Dutch crisis prevention focuses on the scenarios placed in the right hand upper corner of the graph, as these scenarios have a huge impact on Dutch society and the chance that they will happen is very high. In some diagrams published the threats of the coming as well as the past year are presented, to indicate if a change in the likeliness or impact of the threat has occurred. An example of the diagram made, without a yearly comparison, is shown in the figure below.

¹⁷⁰⁰ The 'nationale risicobeoordeling' can be downloaded from the following website: <https://www.nctv.nl/onderwerpen/nv/strategie-nationale-veiligheid/>. It should be noted that the document is only available in Dutch.

Figure 1.1: Risk assessment diagram 2012¹⁷⁰¹

According to the figure above the main threats for the Netherlands are cyber espionage, mineral scarcity and a severe pandemic. For all threats identified in the risk diagram a so-called findings report (Bevindingenrapportage in Dutch) is made for each individual scenario. This report also contains an action plan to prevent this threat from really happening as well as a strategy to minimize the impacts once the threat becomes reality¹⁷⁰².

1.2 Policy and Governance

1.2.1 Strategy scope and focus

Dutch crisis management is organised locally and in case of an emergency the local level will be the starting point of the crisis management system. The system is divided in several GRIP (coordinated regional incident management procedure = gecoördineerde regionale incidentbestrijdings procedure) levels. For each of these levels a dedicated crisis management system has been developed with its own responsible team, as well as the competent authority(ies) and the coordination between the national crisis management system and the competent authorities¹⁷⁰³.

¹⁷⁰¹ Source: Nationale risicobeoordeling 2012, edited by authors

¹⁷⁰² Source: Analistennetwerk Nationale Veiligheid (2013)

¹⁷⁰³ Source: National Centre Terrorism and Security (2013)

The GRIP system is divided in six levels where the so-called GRIP 0 refers to the day-to-day situation in which no special crisis management system is in place and the emergency services perform their usual tasks. GRIP 0 applies in cases of car accidents, small fires etc. Relevant levels for the DRIVER project are GRIP 5 and GRIP national. GRIP 5 refers to interregional emergencies. This can relate to different regions within the Netherlands as well as to cross border interregional emergencies. GRIP national relates to the largest crises where the coordination is done by the Ministry of Security and Justice, in case of emergencies affecting the public order and security, or another Ministry, in case it affects the responsibilities of this particular Ministry. It should be noted that the GRIP structure is not fixed and depending on the specific crisis the GRIP system used, can differ. The mayor is free to choose to upgrade the system or not. Upgrading can also be regulated by the local crisis plan, which lays down the upgrading rules and responsibilities¹⁷⁰⁴.

At national level therefore the crisis management framework is rather complicated as often more than one Ministry is involved. Depending on the crisis a specific crisis management system applies and often more than one Ministry is involved as the crisis affects different areas of competences (see chapter 3). From the perspective of the national government not all crisis management aspects are covered with the same level of detail. This is due to the locally organised response capacity. Main focus of the national government is on prevention/preparedness and recovery. Prevention and preparedness are mentioned jointly as no clear distinction is made between the two (see below).

1.2.2 Monitoring and analytical support to policy making; R&D¹⁷⁰⁵

Since 2012 the National Centre Terrorism and Security (NCTV) is responsible for the dedicated research programme 'Safe by innovation' (Veilig door Innovatie). This programme is broader in scope than crisis management and focuses on general safety issues in the Netherlands. Through this programme public bodies involved in security and safety issues can obtain financial support to develop innovative solutions to improve safety. The innovations do not only have to relate to state of the art technology development, but can also focus on organisational or social (aspects of) innovations.

To obtain financial support the public body needs to submit a proposal to the NCTV. Twice a year the NCTV will review the proposals received and proposals that best match the security goals set by the national government, will be awarded the funding. Preferably the possible outcome of the research should be usable for several bodies involved in the field of security. For these bodies it should be important that their efficiency and/or effectiveness are improved. The public body does not have to be the only partner submitting the proposal. The body can decide to involve partners from the golden triangle (government, knowledge and industry) in their team. However, the two other partners of the golden triangle cannot submit a proposal on their own.

The NCTV also facilitates the R&D efforts of SMEs in the area of security/safety. The NCTV has two R&D programmes that are solely open for SMEs. The first one is the annual programme for the Safety Innovation Competition (Veiligheidsinnovatie competitie). The competition was first held in 2014.

¹⁷⁰⁴ Ibid.

¹⁷⁰⁵ This section is based on: Nationaal Coördinator Terrosisme bestrijding en Veiligheid (2013 #1)

The winner of the competition receives a financial contribution (€ 200,000.-) which allows him to develop a prototype that will be used in the crisis management system. The second programme already exists longer and is called the 'Small Business Innovation Research Programme (SBIR). This programme is organised every two years and small companies can submit their innovative research ideas. During several rounds the group of possible winners is diminished and finally one or two winners are awarded a financial 'prize' which should enable them to further develop their idea.

In addition the NCTV stimulates the cooperation between the partners in the golden triangle. In order to have a good overview of the research needs of public bodies involved in crisis management the NCTV makes an overview of those needs. The needs feed into the demand driven programme 'safe society' (veilige maatschappij) which is managed jointly by the NCTV and the Ministry of Economic Affairs. Content related coordination is done by TNO who needs to set up the research projects. TNO also carries out the so-called technology radar that provides an overview of all technological related research carried out in a specific period of time.

1.2.3 Policy for Prevention and preparedness¹⁷⁰⁶

The policy for prevention and the policy for preparedness in the Netherlands are closely linked and no clear distinction is made between the two. Therefore they are jointly described in this report. The main institution making policy for prevention and preparedness is the national government. Especially policies to prevent/prepare for the large scale events are made on this level. The general policy is made by the Ministry of Security of Justice as they act as national crisis coordinator through the NCTV, which consist of a part focusing on terrorism and a part focusing on crisis management through the national coordination centre (NCC). More specific policies are made by the Ministries responsible for the specific topic, e.g. the Ministry of infrastructure and Environment is the main Ministry developing policies related to flooding.

The Dutch government has introduced a National Security Strategy (2007) that aims to assess whether or not Dutch society is well prepared for a crisis. In case that the conclusion of this assessment is that the Netherlands is not prepared well enough, the government can take additional measures or develop new policies to improve the prevention and preparedness of the country.

Through national campaigns the government aims to make citizens and companies aware of what they can/need to do to be better prepared. Citizens are strongly encouraged through (previous) campaigns such as 'Think Ahead' (Denk Vooruit) to prepare themselves. The government expects that citizens are able to save themselves for a while, so that they are not in need for immediate help. Companies can use tools, developed by the NCTV to become better prepared. The NCTV has developed several e-learning modules that aim to educate companies on how to improve their security systems. One of these modules focuses on espionage while another relates to making employees more aware of possible threats and encourages them to look out for possible disruptions¹⁷⁰⁷.

¹⁷⁰⁶ This section is based on Nederlands Instituut voor de Veiligheid (2013)

¹⁷⁰⁷ Source: <https://www.nctv.nl>

To ensure that vital infrastructure can still be used during a crisis, the Ministry of Security and Justice encourages companies to develop continuity plans that are focused on a specific topic in the field of crisis management¹⁷⁰⁸. For example, since the end of 2009 most hospitals, energy companies and governmental bodies have continuity plans in place that indicate what needs to be done when a pandemic occurs. Besides plans relating to pandemics, research done by the Dutch government showed that companies should also have plans in place relating to ICT and electricity. Developing continuity plans in these areas is compulsory. The Dutch vital infrastructure consists of 12 sectors covering 31 products.

Table 1.6: Overview of critical sectors and products in the Dutch vital infrastructure system

Sector	Products
Energy	Electricity, natural gas and (fossil) oil
Telecommunication & ICT	Mobile phones & land lines; radio, broadcasting and internet
Drinking water	Ability to supply drinking water
Food	Food provision and food security
Health	First aid services and other health care
Financial sector	Ensuring financial payments as well as payments to the government
Surface water management	Water quality and water quantity
Public order and safety	
Legal system	Justice, detention and law enforcement
Public governance	Diplomacy, information provision governments, armed forces and decision making
Transport	Schiphol Airport, Port of Rotterdam, main roads, main inland waterways and rail
Chemical and nuclear industry	Transport, storage, production and processing of substances

Source: Nederlands Instituut voor de Veiligheid (2013)

In order to ensure enough capacity in case something happens the civil authorities have improved the cooperation with the Army. In principle the capacity of the Army can be fully used during times of crisis, however the Army cannot agree on full availability, e.g. in case some of the troops are on a peace mission. The Army has guaranteed that at least 4,600 soldiers are permanently available to help in needed. The Army can assist by:

- Structural capacity → Coast guard, Royal military police, Special support units, Explosive Ordeal Disposal teams (EOD) and the emergency hospital.
- Random capacity → needs to be requested by the administrative powers, e.g. security and surveillance during evacuation, transport for evacuation, fire fighting helicopters, and decontamination capacity¹⁷⁰⁹.

¹⁷⁰⁸ Source: <https://www.nctv.nl>

¹⁷⁰⁹ Source: Ministry of the Interior and Kingdom Relations (2007)

More detailed policies, which are additional to the national ones, can be developed by the Security Regions. These policies are laid down in the policy plans of the Security Regions, which need to be updated once every four years (see chapter 4).

1.2.4 Policy for Preparedness

See paragraph above.

1.2.5 Policy for Response

As response is organised locally, the main policies for response are made on a local level as well. Each Security Region is obliged to make a risk profile, a policy plan and a crisis management plan (see chapter 4). These documents together should provide all necessary guidance needed to properly respond to an incident. Especially the policy plans of the Security Regions provide information with regard to arrival times of emergency services, communication strategies between emergency services & communication to the public and operational guidelines on how to act in certain situations.

The Inspection of Security and Justice, which is part of the Ministry of Security and Justice, is responsible for monitoring on a yearly basis if Security Regions have implemented these required plans and profiles. The results of these monitoring activities are laid down in the 'Staat van de rampenbestrijding', a report that extensively assesses the status quo of the crisis management for a three year period. The most recent one was published in 2013 and describes the status of the crisis management system for the years 2010, 2011 and 2012. Currently the Inspection is preparing the report for 2016, including the years 2013, 2014, 2015¹⁷¹⁰.

In the 2013¹⁷¹¹ report the Inspection mainly assessed whether or not the required documents were in place and if each Security Region had followed the basic rules, e.g. if the plans were mutually adapted. The Inspection also assessed if the Security Region organised an exercise and if this exercise was evaluated. The 2013 assessment was the first assessment since the introduction of the Security Regions in 2010. In the upcoming report the assessment will be further extended and will contain more details. Also some specific themes will be assessed, e.g. crisis communication and interregional exercises.

On the national level few disaster response policies have been formulated. Based on the assessment of the Inspection, the Minister of Security and Justice can adapt the legislation in place or he can urge Security Regions to undertake certain actions, however this is rather uncommon. The main actors are the Security Regions themselves and they need to feel enough urgency to prepare and respond properly.

¹⁷¹⁰ Based on interviews

¹⁷¹¹ Source: Ministry of Security and Justice (2013)

1.2.6 Policy for Relief and Recovery

The policy for relief and recovery is also mainly developed at a national level. Therefore after each crisis a similar set of options become available. These options can be non-financial (often permanently available) or financial (available on ad hoc basis).

Non-financial recovery¹⁷¹²

The national government has introduced several organisations and measures to provide relief to citizens. The main ones are:

- Impact (see below)
- Slachtofferhulp Nederland
 - Professional organisation that helps victims, sufferers and survivors after crises and severe incidents. The organisation does not charge for the help offered as they receive funding from the Ministry of Security and Justice, municipalities and the victims fund.
- Sensoor
 - Professional organisation that allows people to tell their story and ask their questions. The organisation can be reach 24/7 and people can phone or send an email. It is a life line organisation.
- Korrelatie
 - Professional organisation that offers physiological help to people in general, but can also assist after a crisis. Advice can be asked by phone or online.
- Algemeen Maatschappelijk werk
 - General support institution that aims to offer support to all people that are not able to solve their own problems any more. This does not include financial compensation.

Impact does not only focus on the victims involved in a disaster, but also offers professional help to the professionals that were on the scene. The organisation is 24/7 available for professional (police officers, fire fighters and psychologists) and governmental bodies (municipalities and provinces) to offer advice on disasters and large incidents. The organisation also supports municipalities and health care institutions to improve their physiological care, they develop guidelines for decent care after disasters and they have a database on offer providing scientific knowledge on recovery.

Financial recovery

For citizens, companies, governments or associations that have suffered damages the national government offers two possibilities to get some (financial) compensation. It should be noted that not the entire damage will be compensated and for the remaining part citizens should turn to their insurance company.

In the Act on compensation of disasters (Wet tegemoetkoming bij rampen, 1998), is laid down that every person or company who has suffered damage can ask the government for compensation. To receive compensation a crisis or other large event should have happened:

¹⁷¹² This section is based on <https://www.nctv.nl>

- Whereby the life and health of many people, the environment or major material interests have been seriously harmed or threatened, **and**
- Where a coordinated deployment of services from different disciplines or organizations was required to eliminate the threat or reduce the harmful effects.

In order to be able to claim compensation both requirements need to be fulfilled. However it is not enough to claim compensation straightaway. The following conditions need to be fulfilled as well in order to get some compensation (the Act does not allow for full compensation):

- Non-culpable: for example flooding caused by an exceptional storm.
- Uninsurable: no contribution will be made if you could reasonably insure yourself against the damage.
- Non-recoverable: there is no one else who pays the costs.

The government does not often pay compensations based on this act. Since its introduction in 1998, only 5 times the government has paid compensation.

The second act is the Security Regions Act which allows payments from the national government to the Security Regions or municipalities:

- Costs for a **municipality** resulting from actual combating a disaster and the consequences of that fight (emergency response costs). In addition, the costs for which reimbursement is requested need to be unforeseeable. Finally, only the emergency response costs incurred during the period of crisis could be reimbursed. Only a municipality can apply for this type of compensation. The own contribution of the municipality is € 3, - per capita (which is thus deducted from the compensation paid by the national government).
- Costs for a **Security Region** arising from the provision of (fire) assistance (assistance costs). This compensation does not only apply to disasters, but can also be requested for other incidents where assistance is provided by one or more Security Regions. Only Security Regions can apply for this type of compensation. The own contribution for the region per incidents is € 4,500,- (which is thus deducted from the compensation paid by the national government).

1.3 Financing

1.3.1 Investing in preparedness

Dutch crisis management and civil protection is changing rapidly and this influences the procedures for investing in preparedness. In the Netherlands the operational side of crisis management is organised locally. Based on the Security Regions Act each of the 25 Security Regions, combining the efforts of the fire brigade, police and public health institutions, is mainly responsible for the operational mitigation of a crisis. So the equipment of the actors can be used in all sorts of crisis. There is no national crisis equipment available. However in very severe crisis the military can be asked for assistance.

Investing in the fire brigade

As crisis management is organised through the Security Regions it means that investing in preparedness is investing in Security Regions. Each Security Region has a budget to finance general

assistance and emergency response. The budget is partly received from the national government, i.e. the Ministry of Security and Justice, who contributes through the 'Brede Doeluitkering Rampen' (BDUR), a general contribution for crisis management. The largest part, however, is paid by the municipalities that contribute based on the Municipality Fund (Gemeentefonds).

Although the Security Regions combine the expertise of the fire brigade, policy and public health institutions, the largest share of the budget goes to the fire brigade as the fire brigade has the largest role in the emergency response. Both the police and public health institutions receive their budgets through different channels (see below) and in the crisis management system they have a supportive role. Accounting wise the financing of the fire brigade and crisis management are always presented together. Following table shows the yearly contributions of the municipalities to the fire brigade and crisis management since 2005.

Table 1.7: Expenses of municipalities for fire brigades and crisis management (2005-2012)

		2005	2006	2007	2008	2009	2010	2011	2012
Total expenses	X m€	724	819	913	1017	1094	1125	1102	1126
Expenses per inhabitant	X €	44	50	56	62	66	68	66	67

Source: CBS (2013), Brandweerstatistiek 2012

As said the Ministry of Security and Justice is contributing to the Security Region through the BDUR. In 2013 the Ministry contributed € 128,379 thousand to the Security regions (National Budget 2014, article 36). According to the same budget the contribution will rise to € 176,770 thousand in 2014 and from 2015 onwards around € 175 million is available on a yearly basis.

As indicated the municipalities contribute the largest share to the Security Regions' budgets, however during recent years both the contributions of municipalities and the national government have increased, as the following graph shows. The blue line indicates the payments made by the Municipality Fund (in connection with left axis) and the green line indicates the payments made by the national government (in connection with the right axis).

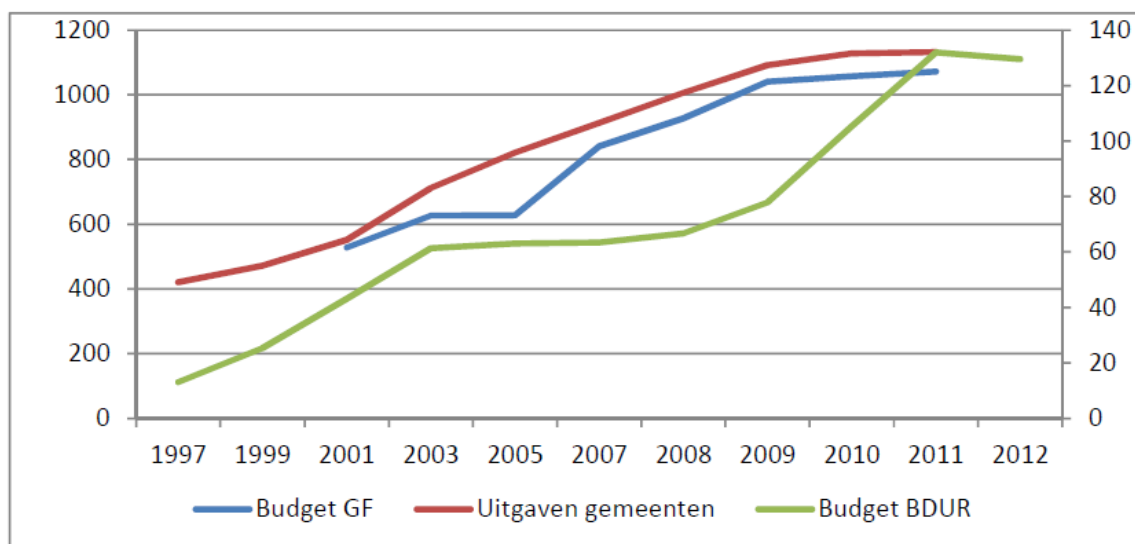


Figure 1.2: Developments crisis management and emergency response¹⁷¹³

Investing in the police

Since 2012 the Dutch police force is structured in a different way. Before 2012 18 different forces existed each with their own budgets and policies. Since 2012 there is only one force, consisting of 18 units. The National Police has to have one policy and receives one overall budget that needs to be divided over the 18 units. The Ministry of Security and Justice is responsible for this budget. According to the National budget (art. 31) the police force received € 4,980 million in 2013¹⁷¹⁴. It should be noted that this is the total budget for the police, and other tasks than crisis response need to be covered with this budget as well.

Table 1.8: Estimated budget for the National Police, x1000

	2013	2014	2015	2016	2017	2018
National Police	4,980,842	4,882,090	4,775,744	4,727,684	4,701,528	4,677,334

Source: National Budget for the Ministry of Security and Justice (2014)

Besides investing in the Fire Brigade (through the BDUR) and the National police, the Ministry of Security and Justice invests in other parts of crisis management as well. The following contributions are made:

- Contributions:
 - Institute for Physical Security (Instituut Fysieke Veiligheid) → responsible for training and educational programmes related to crisis management;
 - Other activities within national security and terrorism.
- Subsidies

¹⁷¹³ Source: Anderssons Elferris Felix (2013), Evaluatie Wet Veiligheidsregio's

¹⁷¹⁴ Source: National Budget for the Ministry of Security and Justice (2014)

- Dutch Red Cross → largest volunteers organisation involved in crisis management. To help them organise their emergency response (buying necessary supplies, e.g. blankets, water etc.) the Ministry subsidises them;
- Education Security Region → to help developing educational programmes for fire fighters;
- Other activities within national security and terrorism → Support for NCTV to carry out the yearly risk assessment analysis.
- Projects:
 - NL-Alert → Development of crisis management communication tool (see chapter 4);
 - National Cyber Security Centre → institute focusing on policies for and impacts of cyber security;
 - Other activities within national security and terrorism → Projects focusing on R&D in crisis management as well as OTOTEL (see chapter 5).

Taking into account all these posts as well as the contribution to the National Police and the BDUR the Ministry of Security and Justice invested around € 5 billion in security related activities in 2013. However, as is indicated in the table, the largest share consists of the police budget that also is used for many other activities than crisis management, e.g. crime investigation.

Table 1.9: Estimated budget for crisis management related activities, x1000

	2013	2014	2015	2016	2017	2018
National Police	4,980,842	4,882,090	4,775,744	4,727,684	4,701,528	4,677,334
BDUR	128,379	176,770	175,040	175,042	175,042	174,918
Contributions						
Instituut Fysieke Veiligheid	31,036	30,236	30,239	37,432	28,397	27,962
Other activities	3,319	2,999	3,000	2,894	2,758	2,702
Subsidies						
Dutch Red Cross	1,850	1,685	1,685	1,685	1,685	1,683
Education Security Region	1,930	1,930	1,930	1,930	1,930	1,928
Other activities	508	4,950	5,613	5,554	5,478	5,441
Projects						
NL-Alert	2,900	2,900	2,900	2,900	2,900	2,897
National Cyber Security Centre	4,463	8,343	8,337	8,336	8,331	8,326
Other activities	11,202	8,578	9,269	9,310	9,245	8,720
Total budget						
Total without Police	188,995	238,391	238,013	245,083	234,766	234,577
Total	5,169,837	5,120,481	5,013,757	4,972,767	4,937,294	4,911,911

Source: National Budget for the Ministry of Security and Justice (2014)

1.3.2 Investing in consequence management

Several actors are involved in investing in consequence management. If objects belonging to the public domain have been damaged, e.g. buildings and roads, the 'government' has to pay. If the object belongs to the national government it will be the responsible ministry that needs to pay. If the objects fall under the responsibility of the regional or local government, these governments will bear the costs. If budgets are tight, the national government can provide assistance. Each of the governments has a budget available for un-expected expenses and these budgets can be used to cover the costs to repair, for instance public roads and buildings, if needed.

If a citizen is affected and his property or health is damaged, he can file an insurance claim. In the Netherlands it is compulsory to have a health insurance. Depending on the extensiveness of the insurance, citizens do need to contribute to treatment by spending their so-called own contribution (Eigen bijdrage). However for all citizens, their own contributions are (legally) limited and once the limits have been exceeded, the insurer will pay the remainder of the costs.¹⁷¹⁵

Also most Dutch citizens have insurances that cover damages related to property. According to a Lloyd's report the insurance penetration in 2011 was 9.5% (premiums as a % of GDP). In the list of 42 reviewed countries the Netherlands was number one, followed by New Zealand (5.2%) and South Korea (4.6%). It should be noted that the penetration rate is not related to the relative risks people are likely to face. The report also calculated if a country is over or under insured by calculating the 'benchmark insurance coverage'. Also here the Netherlands is number 1, with a benchmark of 8.01, indicated that the country is very well insured. Citizens are even better insured than they strictly need to be.

Compared to citizens the different industries are relatively poor insured. The Lloyd's report calculated the insurance penetration rated per industrial sector compared to the Gross Value added (GVA) of this particular sector to the national Gross Domestic Product (GDP) (see table below). Taking all sectors into account the overall insurance penetration for Dutch industry is less than 0.3%, ranking the Netherlands 11th amongst 18 reviewed countries. Frontrunner is the US with a penetration rate of almost 1%, followed by Ireland (0.87%) and the UK (0.75%).

Table 1.10: Penetration rate and GVA contribution per sector (2011)

Sector	Insurance penetration	GVA contribution
Wholesale and retail	0.65%	13.19%
Transportation and Storage	0.64%	4.48%
Agriculture, forestry and fishing	0.51%	2.08%
Real estate activities	0.34%	8.27%
Professional and administrative services	0.32%	13.70%
Arts, entertainment and recreation	0.30%	1.35%
Accommodation and food service activities	0.26%	1.84%

¹⁷¹⁵ Based on interviews.

Sector	Insurance penetration	GVA contribution
Financial and insurance activities	0.24%	3.78%
Manufacturing	0.20%	14.10%
Education	0.16%	4.24%
Human health and social work activities	0.14%	8.64%
Construction	0.12%	5.55%
Utilities	0.12%	1.95%
Information and communication	0.09%	2.46%
Public administration and defence	0.08%	6.81%
Mining and Quarrying	0.04%	3.08%

Source: Lloyd's (2012), Lloyd's Global underinsurance report

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment¹⁷¹⁶

Larger disasters are evaluated. Since 2005 a permanent body for evaluating crisis has been established, the so-called Research Council for Safety (Onderzoeksraad voor Veiligheid). The Council was introduced by the Act on the Research Council for Safety (Rijkswet Onderzoeksraad voor Veiligheid). And this act was accompanied by several Royal Decrees laying down the operational procedures followed by the Council. Before the introduction of the Council each crisis was evaluated by an ad-hoc commission, which often had not enough administrative powers to carry out a full research.

In comparison to the ad hoc commission the Research Council does have administrative powers that are laid down in the Act as well. Members of the Council are allowed to enter all buildings to gather information, they can collect radar images, recordings of interviews with possible suspects, and they are allowed to confiscate databases, audio & visual material, and wrecks. The act also regulates that everyone is obliged to cooperate with the Council in order to help the Council gathering all information to carry out a proper investigation.

The Council will investigate disasters in the following areas: inland shipping, construction and service, crisis management and assistance, defence, health care, industrial accidents, aviation, rail transport, water, road transport and maritime transport. In some case the Council is also authorized to carry out an investigation abroad, e.g. after the recent air crash in the Ukraine. Since its establishment in 2005 the Council has carried out 60 large investigations and dozens of smaller ones.

Everyone can ask the Council to start an investigation; however the Council will only carry out an investigation if they believe an incident is caused by a structural governmental failure. If the Council concludes that this might indeed be the case they will start collecting information as soon as possible

¹⁷¹⁶ This section is based on Onderzoeksraad voor veiligheid (2013)

and often they will visit the incident scene. They interview relevant stakeholders to find out what really happened. Based on the information gathered the Council will assess if there was a structural failure. Based on this information they can decide to further investigate the incident. In this investigation the Council is assisted by an advisory committee which exists of experts in that specific field. Jointly they draft a report which provides an overview of what has happened, what went wrong and what needs to be done to prevent a similar incident from happening.

The Council has three basic values:

- **Independent:** the judgement of the Council needs to be objective, impartial and independent. The Council needs to be critical with respect to all parties involved.
- **Transparent:** the council needs to be transparent about the choices they make and they need to underpin why they use certain methodologies.
- **Professional:** to ensure a decent report the Council needs to look for the right expertise and involve a sufficient number of external experts.

In case the conclusion is that the responsible authority has made severe mistakes it could lead to political consequences. For example, in case of a large pandemic with many fatal deaths, it could be concluded that the Minister responsible for public health made such severe mistakes that he should no longer carry out his function. He could be asked to resign his post.

Examples of recently performed evaluations are:

- The crash of an aircraft of Turkish Airlines;
- The fire at Chemie-Pack, a Dutch chemical factory;
- The shooting in Alphen a/d Rijn.

1.4.2 Departmental Lessons Learned systems

In the Netherlands the main actors involved in operational crisis management are the Security Regions. According to the Royal Decree on Security Regions (art. 2.5.1) each region should organise at least one exercise per year and they are obliged to evaluate the strengths and weaknesses of their own performance. Once a year each region needs to send the information to the Inspection for Security and Justice (Part of the Ministry for Security and Justice). The Inspection combines the information and writes an overall report titled 'Status quo of the Dutch crisis management system'. This report contains the main lessons learned and Security Regions are encouraged to implement the lessons learned in their procedures. Based on article 57 of the Security Regions Act the Inspection is entitled to monitor the performances of the regions.

In order to help each Security Region to perform the exercise and ensure that the results of the different exercises are comparable the Inspection has drafted a handbook describing how the self assessment needs to be carried out. The handbook describes the different roles of the Security Regions and the Inspection in an exercise, the preparation steps to take, as well as the execution &

evaluation steps. Every year the Inspection will evaluate whether or not the Security Region has implemented the lessons learned from the year before¹⁷¹⁷.

The self evaluation by the Security Regions is seen as a very important instrument for implementing lessons learned. According to an extensive research carried out by the Inspection it is shown that the effects of self evaluation have much more effect on the performance the Security Regions than reports made by third parties. Therefore the main lessons learned are based on the own experiences of the Security Regions during their daily operation as well as the exercises.

1.4.3 Centralised (national) Lessons Learned system¹⁷¹⁸

Incidents are evaluated on an individual basis and often only the actions taken by Security Regions are assessed as they are the main bodies involved in crisis management. Only a limited number of larger crises involving the national government occurs and so experiences in evaluating very large disasters is limited. The incidents can be evaluated by the Research Council for Safety or the Inspection for Security and Justice. In principle the Research Council can investigate all incidents it would like to investigate, based on legislation. In case the Research Council indicates that it would like to investigate an incident, no other body is allowed to conduct an investigation into the same incident. However in practise, the Research Council involves many other bodies during their investigations. These bodies can look into specific topics, e.g. victim identification or communication. They can also provide general support, e.g. by free up capacity.

During their investigations, the Research Council will always consider recommendations provided in earlier investigations carried out by themselves or others. The research Council will analyse whether or not the recommendations provided have been followed. In case they have not been followed the Research Council often concludes that no lessons were learned. The Inspection for Security and Justice on the other hand does not very often consider earlier provided recommendations and for them it is more difficult to assess whether or not lessons have been learned. They intend to change this procedure and evaluate more often if recommendations have been implemented so that they are better able to assess if lessons have been learned. Both organisations focus their investigation on local incidents and their check on lessons learned there for is also often local. However it is possible that their recommendations are more general and therefore can be applied to other Security Regions as well.

1.4.4 International exchange for Lessons Learned

The Netherlands holds exercises with its neighbours, Belgium and Germany, on a regular basis. With both countries at least once a year a cross border exercise is done and each exercise is evaluated. The things learned during these exercises are included in the handbooks and guidelines used in the daily crisis management¹⁷¹⁹.

¹⁷¹⁷ Source: Zelfevaluatie instrument – Handreiking evaluatie systeem oefeningen en GRIP 3/4 incidenten

¹⁷¹⁸ Based on interviews,

¹⁷¹⁹ Source: Nationaal Coördinator Terrorisme bestrijding en Veiligheid (2014 #3)

Between the Netherlands and Germany, the Netherlands and Belgium and between the Benelux countries several treaties and agreements related to crisis management and the way each country should respond have been signed. These treaties and agreements also include provisions on mutual exchange of information and early warning in case of major disasters (see chapter 3).

1.4.5 Regular policy reviews

To improve policies especially policy evaluations are important. On a national level recently the evaluation of the Security Region was carried out. This evaluation assessed if the Security Regions Act, which introduced this new administrative structure of Security Regions, had reached the desired effects. The evaluation was carried out on behalf of the Ministry of Security and Justice by an independent consultancy firm¹⁷²⁰. Based on the recommendations done it is possible that the Minister decides to change the policies taken so far. If really necessary the Minister can decide to change the law or accompanying Royal Decrees as well.

Also the policy plans made by the Security Regions are evaluated. These plans are evaluated by the Inspection of Security and Justice. The Inspections does not only evaluate the policy plans, but will also consider the risk profile and the crisis plan. In additional the Security Regions need to carry out exercises which need to be evaluated. Based on all the evaluations done the Inspection can advise a certain Security Region to change its policy plan. The Inspection does not have any powers and so cannot force a Security Region to change its policy plan or procedures. In case the Inspection establishes that severe points are falling behind they can try to conclude an improvement agreement with the Security Region in question. In this agreement the Security Region promises to improve their performance and plans. However, also in this case the Inspection cannot give the Security Region penalties in case they do not stick to the agreement. If a situation is really improper the Inspection can try to ask the Minister to urge the Security Regions to improve their performance. Up till now this never was an issue and it is unclear which procedures will be followed.

National policies are mainly tested and therefore reviewed, during a national exercise. Disadvantage of the national exercise is that it has a long preparation time and often turns into a demonstration showing the public that the system works and what it can do. Some stakeholders fear that the national exercises do not fully reflect the day-to-day situation and they place question marks whether or not the system is actually working that way. It remains a question if the system would work in the same way when something unexpected happens¹⁷²¹.

1.5 Resilience

The concept of resilience in civil protection, in terms of country's capacity to withstand shocks due to natural and other disasters, to rebuild itself with efficiency, and to improve on the pre-existing state wherever, has not been explicitly established by law or another normative act. However in the Netherlands several large awareness campaigns were set up in order to increase societal resilience.

¹⁷²⁰ Source: Andersson Elffers Felix, (2013)

¹⁷²¹ Based on interviews.

The campaign called Think Ahead (Denk vooruit¹⁷²²) encouraged citizens to prepare for possible disasters, by buying survival kits and be aware what they need to do in case a crisis happens. They also need to understand the need to ensure to save themselves first and should not solely rely on the emergency services. The campaign is finished, but the information can still be found on-line. Currently no plans are in place to launch a new awareness campaign.

Based on the Security Regions Act some companies are obliged to prepare a crisis management plan. The Act lays down that companies falling under the Royal Decree Risks severe accidents 1999 (Besluit Risico's Zware Ongevallen) and airports need to have crisis management plans in place. Mainly chemical plants are required to have a crisis management plan in place. These plans will increase the resilience of these companies in case a crisis happens.

1.6 Information sharing and data protection

Information sharing during times of crisis

The Royal Decree Information in connection to disasters and crisis (Besluit informatie inzake rampen en crisis, 1994) provides an extensive overview who and when information needs to be exchanged in case of emergency. The Royal decree describes amongst others when information from the government should be transferred to the population and when another country should be informed of possible threats. The Decree does not explicitly refer to the sharing of sensitive information with other states. Whether or not sensitive information is shared will depend whether or not the Netherlands has concluded a treaty with the other state agreeing to share such information in case of a crisis.

With regard to personal data the public authority is, in principal, required to obtain explicit and unambiguous permission to use personal data (based on the Wet bescherming persoonsgegevens, article 8 sub a). However article 8 sub e of that act states that a public authority can use personal data (without consent) if the public authority needs the personal data in order to fulfil its public duty in a good and sufficient manner. According to the explanatory memorandum accompanying the act this applies in case of an emergency where medical care is required. The public authority is allowed to share personal information without the explicit consent of the people involved, because in an emergency situation it would be undoable to obtain consent of everyone. In that case providing medical care and combatting the emergency take precedence over individual consent to use personal information.

Registration of volunteers

In the Netherlands the level of voluntarism is high. The largest group of volunteers is working for the fire brigades, being 70-80% of all volunteers. The share of volunteers assisting the police is relatively low (only 4%). Both volunteers assisting the fire brigades and the police receive a monetary compensation for their work. Other volunteer groups are volunteers 'working' for the Dutch Rescue Service (patrolling the inland waterways and providing life guard services) and the Dutch Red Cross. All these 'official' volunteers are registered as they need to obtain certificates and are required to

¹⁷²² Source: <http://www.crisis.nl/wees-voorbereid.aspx>

follow trainings in order to be able to execute their task. One of the compulsory trainings they all follow, each in their own organisation, is the First Aid Training¹⁷²³.

Besides these groups of official volunteers, which have dedicated training and are registered, a group of unofficial volunteers, people that would like to assist because they feel socially responsible to do this, is available. These people are neither registered nor trained. Currently no clear policy is in place how to deal with these volunteers. However, such a policy is urgently required, as situations where untrained volunteers are involved occur more and more¹⁷²⁴.

Using Social Media

The usage of social media to gather information in times of crisis is still limited in the Netherlands. Although public authorities have several fora at their disposal to communicate in case of a crisis, the usage of these fora to collect data is still limited. In a vision paper on social media and crisis communication published by the NCC it is stated that the public authorities should always listen to messages placed on social media. There is no clear strategy yet how to deal with message placed on Facebook, Twitter or Flickr. The main problem is to filter the correct information. Much information is posted on social media, but not all of the information is reflecting to the true situation. Therefore communication employees need to filter the information found and verify whether or not the information is correct. The Dutch government is currently working on methods how to verify information collected via social media¹⁷²⁵.

¹⁷²³ In case of an emergency the assistance of these volunteers can be required by the competent authority. Normally volunteers fall under the authority of their fire brigade, police force or dedicated department within the Red Cross, but if the crisis is large and one of the ministries is the competent authority, that Ministry can involve the volunteers itself. The official volunteers are available on a permanent basis and if something happens they can be quickly mobilised to assist.

¹⁷²⁴ Based on interviews.

¹⁷²⁵ Source: Infopunt Veiligheid (2013), 'Sociale media: informatiebron en communicatiekanaal'

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The framework for national crisis management is laid down in the national guide for crisis decision making¹⁷²⁶. The guide is established by the council of ministers and can therefore be qualified as a Royal Decree. The Handbook is legally binding and actors involved need to comply with the rules laid down in this guide. The guide is regularly updated. The current Handbook was adopted in 2013, replacing the previous version which was adopted in 2009. The procedures laid down in this national guide apply to all (possible) crisis situations that require broad intervention. Main coordinating Ministry is the Ministry of Security and Justice. This Ministry is the main responsible Ministry in case the crisis affects the public order and security. The Ministry has a more coordinating role in all other types of crises. In such cases the Ministry under whose responsibility the crisis normally falls is the main responsible Ministry. The Handbook covers the following topics:

- Crisis-related decision making on an official level (within a Ministry/department);
- Crisis-related decision making on a political-administrative level (between Ministries through their Ministers);
- The National Crisis Centre (NCC);
- The National operational coordination centre (LOCC) and the National Operational Staff (LOS);
- The National Core team Crisis Communication (NKC);
- Relevant legal aspects, focusing on emergency law;
- International crises, relating to how assistance is provided or asked for;
- Recovery phase, once the crisis has happened;
- Evaluation, to come to lessons learned.

This Handbook applies to the largest crises possible that are inter-regional or even cross border. In case a crisis relates to the competence of one specific Ministry or a specific topic, e.g. large pandemic, the national guide is extended and at some points replaced by a specific national crisis plan (NCP). In these plans the procedures to be followed are described as well as the specific competences of the different actors (see chapter 4).

If the crisis affects a Security Region, which is a smaller geographical part, the leading plan is the crisis plan of the Security Region. The provisions and actions laid down in this plan are based on the national handbook and guidelines given by the Minister of Security and Justice and need to be incorporated as well.

Additional policies relating to crisis management can be made by the Ministry of Security and Justice. The Minister needs to send the new policy to Parliament, which has the right to adopt, amend and eventually decide on the proposal of the Minister of Security and Justice.

¹⁷²⁶ Source: National Centre Terrorism and Security (2013), 'Nationaal Handboek Crisisbesluitvorming

2.2 General crisis (emergency, disaster) management law

Wet Veiligheidsregio's 2010

The main Act regulating crisis management is the Act on the Security Regions (Wet Veiligheidsregio's), which was adopted in 2010. This act has replaced the Fire Service Act of 1985, the Disaster Act and the Act on Medical Assistance in Times of Disaster. The Act on Security Regions has harmonised all disaster management and within the Netherlands the 25 Security Regions are now responsible for crisis management in their own geographical area. In case the crisis is larger than their own area, the regions are obliged to join efforts in order to mitigate the effects.

Dutch operational crisis management is in principally organised locally. Based on the Security Regions Act, article 2, the Mayor and Aldermen are still the main responsible body for the fire brigade, the disaster control and management as well as the medical assistance. Article 5 indicates that the mayor is the chief-in-commander in case of a crisis. Everyone that provides assistance needs to follow the commands given by the mayor. This also holds for the Army if they are asked to provide assistance during a crisis at local level. Furthermore, the mayor can give orders to the regional ambulance services if this is needed from a public order point of view (article 6). The mayor also needs to provide information to the population relating to the cause, size and consequences of the disaster (article 7).

Although the mayor is the chief-in-commander during a crisis certain tasks have been transferred from the individual municipalities to the Security Regions. According to article 10 the following responsibilities have been transferred to the Security Regions:

- Making an inventory of the risks on fire, disasters and accidents;
- Advising the competent authority on the risks of fire, disasters and accidents that have laid out in regulations or the policy plans;
- Advising the mayor and aldermen about how the fire brigade (which falls under their responsibility) could be best organised and operated;
- Prepare for firefighting and organising the crisis control and management;
- Setting up and maintaining a fire brigade;
- Setting up and maintaining the GHOR (= emergency health care);
- Provide an emergency control room;
- Purchasing and managing the common equipment needed;
- Organize and maintain the information exchange between the Security regions, fire brigade, GHOR and the control room.

The Security Regions Act does not only provide an overview of the responsibilities of the mayor/aldermen and the Security Region, but also describes the tasks of the fire brigade and the GHOR in case of an emergency. The role of the police in case of a crisis is laid down in another Act, the Act on the police force (Politiewet, 2012).

The Minister of Security and Justice can determine national goals for the Dutch crisis management system (articles 37 and 38). Each Security Region needs to ensure that the national goals are transferred to their own policy plan. Not incorporating the national goals can lead to administrative

sanctions. Whether or not the goals are implemented, is checked every year. National goals relate to crises that are likely to affect large parts of the country, e.g. pandemic, flooding, or crisis that affect the national or international interests. Through the national goals, priority can be given to certain aspects of preparedness, e.g. multi-disciplinary practise.

The act also indicates how the responsibilities are transferred entirely to the head of the Security Region in case the disaster affects more than one municipality. As a crisis becomes more complex and more partners become involved it is more important to have simple structures. According to article 39 the Head of the Security Region can take over all responsibilities of the mayor. In the articles 40-44 some additional requirements are laid down. If the crisis concerns more than one Security Region or the national government finds that they should be in control of the crisis, they can take over the responsibilities of the head of the Security Region or the mayor, based on the articles 52 to 54. In this case the national structure will be in place (see chapter 3.1 for the organisational structure).

Besluit Veiligheidsregio's 2010

The Act on Security Regions is a formal act established by Parliament, and therefore is difficult to change. The more practical rules, the specific details and clarifications, e.g. handling specifications for dangerous goods, are laid down in an accompanying Royal Decree (Besluit Veiligheidsregio's). This Decree was adopted in 2010 and can be easily updated when needed. The decree lays down quality measures that need to be adopted by the different organisations mentioned in the act.

A set of minimum criteria has been set out, including the estimated arrival time of the fire brigade at the incident scene. The measures aim, on the hand, to improve the uniformity and comparability both within and between the involved organisations and on the other hand they are used to make the performance of the Security Regions more transparent. In the end the assistance procedures between the regions and the supra regional/national should become more efficient and effective.

Besluit personeel veiligheidsregio's 2010

Another Royal Decree based on the Security Regions Act is the Decree relating to the personnel of the Security Region (Besluit personeel veiligheidsregio's). In the decree the different functions within the fire brigade, GHOR, the multi-disciplinary functions and industry fire brigade functions are mentioned. For all functions the maximum possible job levels are indicated and training possibilities are mentioned. All personnel need to keep up their experience by actually being involved in the crisis management, practise and training. Aim of the minimum requirements is to ensure uniformity between the different regions.

2.3 Emergency rule

2.3.1 Emergency powers on national level¹⁷²⁷

In case of an emergency the starting point is the legislation and regulation currently in force. So each authority will have, in principle, the same competences as it has without a crisis. However legislation and regulation specifically applicable to the crisis takes precedence over other regulation. An extensive overview of the competences currently in place can be found in a handbook called 'Crisis en recht: schema's bevoegdheden en verplichtingen tijdens crises' (2008). The handbook describes for 27 specific areas who is the competent authority for taking certain measures and what the legal basis is for this competence.

For example the mayor of each city has the obligation to inform the citizens, emergency services, Commissioner of the King and Ministry of Interior Affairs on the current water levels, in case water levels are extremely low or high compared to usual water level. However the authorities responsible for the water quality (Waterschappen) provide specific information relating to water management. Rijkswaterstaat, the Dutch fairway authority, is responsible for the communication to inland vessels. Together these authorities need to prepare for a possible crisis and need to ensure that if the crisis emerges their response is appropriate.

Emergency law can only come into force, when the regular legal powers and competences are not sufficient to overcome the extraordinary event. In that case dedicated competences can come into force, however only in a well-balanced and flexible way. Several acts are in place providing the legal basis for these dedicated competences. These acts also indicate when and how these dedicated competences come in force. The acts are:

- Coordination Act extraordinary events (Coördinatiewet uitzonderingstoestanden, 1996);
- Act extraordinary powers civil authority (Wet buitengewone bevoegdheden burgerlijk gezag, 1996);
- War Act for the Netherlands (Oorlogswet voor Nederland, 1996).

Each of these three acts can ensure that emergency law will be used. Dedicated emergency laws will come into force, depending on the severity of the emergency. Examples are the Emergency Act on Rationing (Hamsterwet, 1962), Emergency Act on financial transactions (Noodwet financieel verkeer, 1978) and Emergency Act on transportation (Vervoersnoodwet, 1962)¹⁷²⁸.

The emergency law or parts of it can only take effect when the state of emergency ('noodtoestand') is proclaimed. The state of emergency has two phases; the limited state of emergency or the overall state of emergency. The proclamation of a state of emergency as well as the extraordinary competences is done by Royal Decree. The Royal Decree is issued by the Prime Minister, who is also

¹⁷²⁷ Source: National Centre Terrorism and Security (2013), 'Nationaal Handboek Crisisbesluitvorming'

¹⁷²⁸ All emergency acts are: Noodwet rechtspleging, Wet verplaatsing bevolking, Wet militaire inundatiën, Kaderwet dienstplicht, Inkwartieringswet, Vervoersnoodwet, Havennoodwet, Hamsterwet, Distributiewet, Vorderingswet, Noodwet voedselvoorzieningen, Noodwet arbeidsvoorziening, Noodwet geneeskundigen, Noodwet financieel verkeer, Vaarplichtwet.

the Minister of General Affairs. Continuation of extraordinary competence needs to be approved by the Parliament, consisting for both Chambers.

Based on the acts mentioned above it is possible to limit the rights of civilians and institutions in a case of emergency. However civil rights can only be limited if a general state of emergency is proclaimed and the limitation should not last longer than strictly necessary. For example, in case of a possible dike breach the Waterschap (responsible for water management in its appointed area) can decide to strengthen the dyke and other relevant parts of the waterway without asking the consent or even informing the owners of the property on which actions they are going to take.

2.3.2 Emergency powers for mayors and heads of Security Regions

Also at a local level emergency law is in place. Based on the Municipality Act (Gemeentewet, 1992) the mayor of a city has the following emergency powers: the emergency command and the emergency regulation. The emergency demand can be used for specific persons or industries, e.g. a high risk chemical plant, while the emergency regulation applies to all, e.g. disaster tourists. In addition to the emergency command and emergency regulation the mayor is during crisis the commander-in-chief of the emergency services, including parts of the Army, if they provide support. It is important as these services normally do not fall under the responsibility of the mayor and no hierarchal cooperation relations are in place. Only exception is the police force, as the mayor has the responsibility of the police force in cases of public (dis) order. This is based on the Act on the Police force (Politiewet, 2012).

The Head of the Security Region can take over all the administrative powers of the mayor, including the responsibility for the police force, if the crisis exceeds the competences of one mayor only.

For both the mayor and the head of the Security Region it is regulated that they cannot use their emergency powers under all circumstances. Emergency powers can only be used if they fulfil the two basic principles of proportionality and subsidiarity. Proportionality refers to the severity of the emergency powers in relation to the size of the crisis. Subsidiarity is only allowed if the usual competences are no longer sufficient to handle the crisis situation. Normally the mayor or the head of the Security Region are not allowed to interfere in the functional chain (see chapter 3). However, they can interfere if the public order or safety is at stake, but it needs to be the last possible remedy. This is based on the principle of subsidiarity. In case of an emergency they can more easily interfere¹⁷²⁹.

It should also be noted that in some cases even the emergency powers are no longer sufficient enough to handle the crisis, this holds both for the local as well as the national crisis management. In these cases the unwritten emergency powers can be used. These norms are not laid down in any act, but can be used based on common understanding. The Dutch judicial power has accepted this phenomenon. Once the crisis is remedied a democratic justification needs to be given¹⁷³⁰.

¹⁷²⁹ Source: Infopunt veiligheid (2012)

¹⁷³⁰ Source: National Centre Terrorism and Security (2013), 'Nationaal Handboek Crisisbesluitvorming'

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

In the Netherlands two types of crisis management systems are distinguished. On the one hand there is the general crisis management system related to public safety and national security. Competent Ministry to undertake action is the Ministry of Security and Justice and the relevant practises are laid down in the National guide for crisis decision making (see above). On the other hand there is specific crisis management, which can relate to a specific threat which was identified in the risk assessment. For a specific crisis the Ministry under who's competence the topic falls, is responsible and if needed a dedicated NCP is made, e.g. the NCP for high water levels and flooding. In case the Minister of Infrastructure and Environment will be responsible and needs to draw the plan¹⁷³¹.

For each crisis area a map (Bestuurlijke netwerkkaart) has been developed¹⁷³². These maps are legally binding and the indicated authorities need to follow the structures and responsibilities laid down in this document. The map provides information on the types of crises expected in this specific field, the competent authorities, the administrative powers available and guidance on how to act. The map also shows a diagram of the interrelations between the different actors and the general chain. The maps are regularly updated in order to ensure their effectiveness in crisis management. First an example of a summary table is presented, showing the main information, i.e. type of crisis, competent authorities and types of measures. Secondly, an example of the map used to show interrelations between the competent authorities and the emergency services is provided. Both examples presented relate to pandemics and apply to the Ministry of Health care, Welfare and Sport.

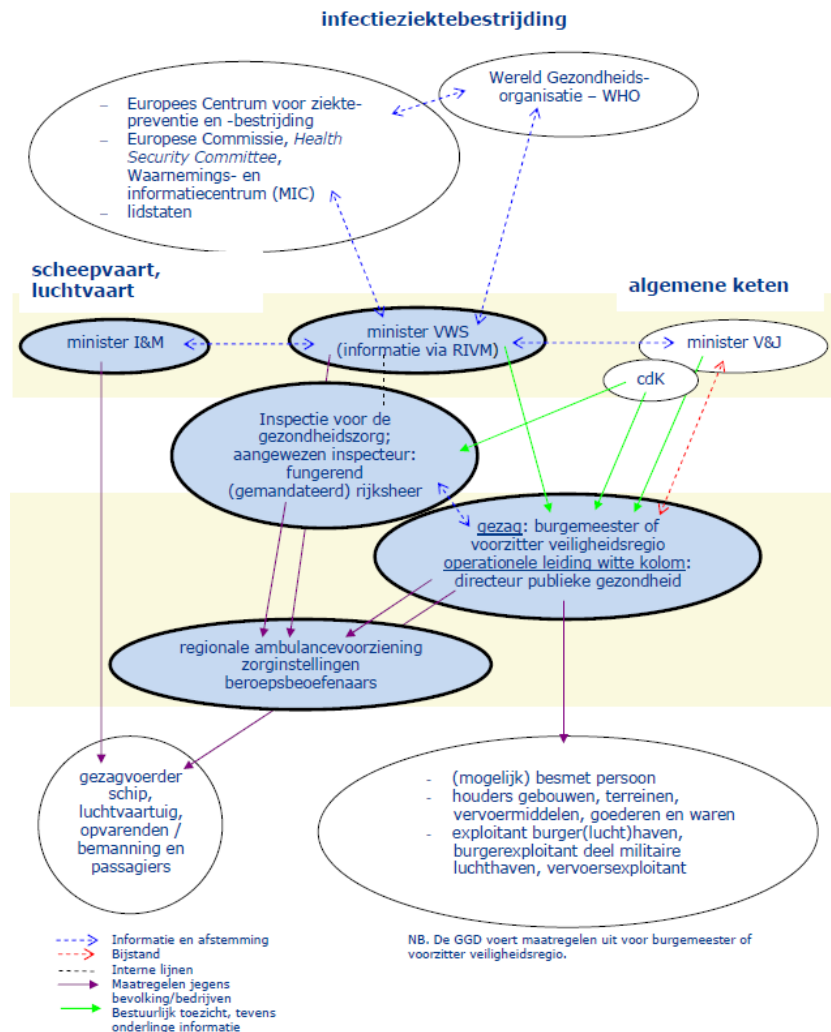
Table 2.1: Summary table is presented, showing the main information

Type of crisis	(threatening) diseases, including diseases transferable between humans and animals)
Competent authority	<ul style="list-style-type: none"> • Mayor • Chairman Security Region • Minister of Health • Minister of Infrastructure and Environment • Minister of Economic Affairs
Types of measures	<p>General:</p> <ul style="list-style-type: none"> • Measures with respect to individuals • Measures with respect to buildings, terrains and goods • Distribution of vaccines and therapeutic pharmaceutical products • Measures at EU inner and outer borders, vessels and aircrafts & airports • Measures with respect to vessels and aircrafts • Measures with respect to individuals and goods after arrival vessels and aircrafts • Measures with respect to port and airport operators • Measures to suppression, prevention and fighting zoonosis

Source: Nederlands Instituut voor de Veiligheid (2013), edited by others

¹⁷³¹ Source: Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing

¹⁷³² Source: Nederlands Instituut voor de Veiligheid (2013)



65

Figure 2.1: Overview map of relations between the different actors¹⁷³³

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

As described in paragraph 2.2 the Dutch crisis management system is locally organised, hence through the Security Regions. For more information on the legal scope and status of local crisis management arrangements, please see paragraph 2.2.

With the introduction of the Wet Veiligheidsregio's each Security Region is required to draft a regional crisis plan (article 16), joint by a policy plan and a risk profile (see chapter 4). The Netherlands consist of 25 Security Region and therefore 25 separate regional crisis plans need to be in place. The regional crisis plan describes how the regional crisis management will be organised and what the role and responsibilities of the police, fire brigade, and medical assistance are. To help each

¹⁷³³ Source: Nederlands Instituut voor de Veiligheid (2013)

Security Region to draft their regional crisis plan and to ensure similarity between the 25 different plans, the reference guide for a regional crisis plan was published in 2009 (Referentiekader Regionaal Crisisplan 2009). The reference guide aims to structure the regional processes by using similar definitions and applying national standards¹⁷³⁴.

The regional crisis plans are not only guidance for the different actors involved in crisis management, but are legally binding. Deviation from the guidance given by these regional plans is seen as undesired behaviour, however if the mayor or the Head of the Security Region decides deviation is absolutely necessary, he needs to explain why the deviation took place.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The fire brigade

Most volunteers are part of the fire brigade (see chapter 1). As these volunteers assisting the fire brigade, are entitled to a monetary compensation for their work, they have a contractual agreement with the fire brigade. Based on the Civil Servants Act (Ambtenarenwet, 1929) the volunteers have their own legal position and are partly covered by the CAR-UWO (College of Employment Matters). In case of an emergency the volunteers can be easily asked for help as they are available on a permanent basis. Each local fire brigade is insured for personal injuries or deaths and this insurance also apply to volunteers. It is reasoned that volunteers suffering damage during the execution of their job or suffering other damages, are insured by lump sums¹⁷³⁵.

Table 2.2: Example of damages to be claimed by voluntary fire fighters in Rotterdam (2012)

Type of damage	Compensation
Death	Capital repayment → € 110,000 Widow repayment → € 17,500
Permanent disability	Capital repayment → € 200,000 Interest payment (wage labour) → € 17,500 Interest payment (self employed) → € 35,000
Medical expenses	Secondary payment with a maximum of € 18,2000
Predisposition	€ 23,000

Source: Brandweer Rotterdam Rijnmond (2012)

The Dutch Red Cross

The role of the Red Cross has been laid down in the Royal Decree Red Cross 1988 (Besluit Rode Kruis 1988). The core tasks of the Red Cross are to provide medical assistance at the incident location by sending a Quick Response Medical Assistance Team, support the municipal government to provide shelter and relief for the evacuated population and to support the municipal government in registering and tracing missing persons. In addition the Red Cross provides services to supply

¹⁷³⁴ Source: <http://www.infopuntveiligheid.nl/Publicatie/Dossier/80/regionaal-crisisplan.html>

¹⁷³⁵ Source: <http://www.car-uwo.nl/onderwerpenindex/brandweervrijwilligers/algemene-bepalingen/werkingsfeer>

bandages, mattresses, blankets and so on. They also have to communicate with all their volunteers. In organisational structure the Red Cross volunteers align with the Security Region and they need to answer to the Regional Emergency coordinators. Each volunteer is risk insured, so in case the volunteer is injured during the execution of his tasks, the Red Cross will ensure compensation.

2.7 Legal regulations for international engagements of first responders and crisis managers¹⁷³⁶

EU regulation for assistance

The Netherlands, as member of the EU, has implemented the EU regulation with respect to crisis management. Some of the legislation comes from the Council, and other procedures and forms of cooperation have been concluded in a treaty. The treaty of Prum mainly focuses on increased cooperation between the signing countries¹⁷³⁷ in the field of terrorism, illegal migration and cross border criminal activities, while the Council Decisions regulate some aspects of cross border assistance. The decisions focus on the procedural side of assistance indicated how requests should be filled, when countries need to respond and how the teams provided are coordinated. The following decisions and treaties have been implemented:

- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations.
- Council Decision of 8 November 2007 establishing a Community Civil Protection Mechanism
- Prum Convention of 27 May 2005 on the stepping up of cross-border cooperation, particularly in combating terrorism, cross border crime and illegal immigration.

Bilateral and regional agreements between the Netherlands and Germany

Beside the multilateral agreements, the Netherlands has concluded agreements and plans with Germany. The agreements and plans lay down how the Netherlands can provide assistance to accidents on German soils and vice versa. Also some more structural support is regulated. Especially the plans relating to the fire brigades provide the opportunity to help each other on a daily basis. So for a fire in the border region both the Dutch and German brigades are warned and often they jointly go to the incident scene to mitigate the effects. The main agreements and plans currently in place are:

- Agreement between the Netherlands and Germany on mutual assistance in combating disasters, including serious accidents of Bonn 1988
- Agreement between the Netherlands and Germany on cross border police action and the cooperation in criminal matters of Enschede 2006
- Euroregional disaster plan for the Euroregion Maas-Rhine-North
- Understanding on cross border support for health, fire brigade, technical and specific assistance in the Euroregion Maas-Rhine
- Cross border cooperation plan by disasters and severe accidents between the regions Noord and Oost Gelderland, Twente, Grafschaft Bentheim and the district Borken

¹⁷³⁶ This section is based on ANVIL, country study: The Netherlands (2013)

¹⁷³⁷ Signing countries where: the Netherlands, Belgium, Luxembourg, Germany, France, Spain and Austria

- Cross border assistance plan of Technisches Hilfswerke, Landesverband Nordrhein-Westfalen, for support in the Netherlands at daily activities in the fire brigade regions Twente, Noord and Oost Gelderland, Gelderland Midden, Limburg Noor den Zuid Limburg

Bilateral and regional agreements between the Netherlands and Belgium

Also between the Netherlands and Belgium additional agreements have been made. Some of the agreements are more formal than the ones made with Germany as treaties have been concluded. Beside the treaty some additional agreements have been made that focus on cross border assistance and cooperation between the relevant regions. Also here the procedures of providing assistance on each others territory have been included. Main legislation is:

- Treaty between the Kingdom of the Netherlands and the Kingdom of Belgium on mutual assistance in combating disaster accidents of the Hague 1984
- Bilateral agreement between the Provinces of Luik (Belgium) and Limburg (the Netherlands)
- Bilateral assistance plan between the Provinces Noord-Brabant (the Netherlands) and Limburg (Belgium) of Den Bosch 1992
- Disaster protocol and handbook disaster protocol Euroregion Scheldemond

Multilateral agreements

Closely located to the Netherlands and Belgium is Luxembourg that is part of the Benelux. Within the Benelux main additional agreements have been and also for cross border assistance in case of disasters and accidents additional agreements are concluded:

- Memorandum of understanding between the Netherlands, Belgium and Luxembourg to cooperate in the area of emergencies with possible cross border effect of Senningen 1996
- Treaty between the Kingdom of Belgium, The Kingdom of the Netherlands and the Grand Duchy of Luxembourg on cross border police action
- Benelux 2009, Ordination of the Committee of the Benelux with respect to cross border first response ambulance services.

3 Organisation

3.1 Organisational chart

The operational crisis management is organised locally. On a national level there is hardly any operational capacity available. From an operational perspective the municipality or the Security Region (collection of several municipalities) is the main body to organise crisis management as they are also involved in daily incident management. The Netherlands consists of 403 municipalities, divided over 25 Security Regions. In the Dutch crisis management the general idea is that the organisation responsible for incident management is also the starting point in case of an emergency. When a small incident or crisis emerges the decisive power lies with the municipalities or the Security Region (depending on the size of the crisis). If the crisis affects more than one Security region the national government needs to be informed and if needed can take over the coordination of the crisis. In that case the national crisis management system is activated.



Figure 3.1: Location of the 25 Security Regions in the Netherlands¹⁷³⁸

The national crisis management in the Netherlands is split in two. On the one hand there is general crisis management, which focuses on public order and safety. This procedure is called the general

¹⁷³⁸ Source: www.imergis.nl

chain and in every larger crisis this chain plays a role, however the size of the involvement can differ. On the other hand there is functional crisis management system, which concentrates on crisis in a specific functional area, e.g. electricity, pandemics or terrorist attacks. This procedure is called the functional chain.

3.1.1 General chain: violence of public order or safety¹⁷³⁹

In case a crisis emerges that is larger than strictly local the general chain will be started. The responsible Minister is the Minister of Security and Justice, assisted by one or several of the King's Commissioner(s) (CdK), the highest public servant of a province¹⁷⁴⁰. Depending on the geographical location and the size of the crisis this group is extended by the relevant heads of the Security Regions and/or the mayors. These bodies can take measures that will affect the people and enterprises. The figure below shows the structure of the general chain.

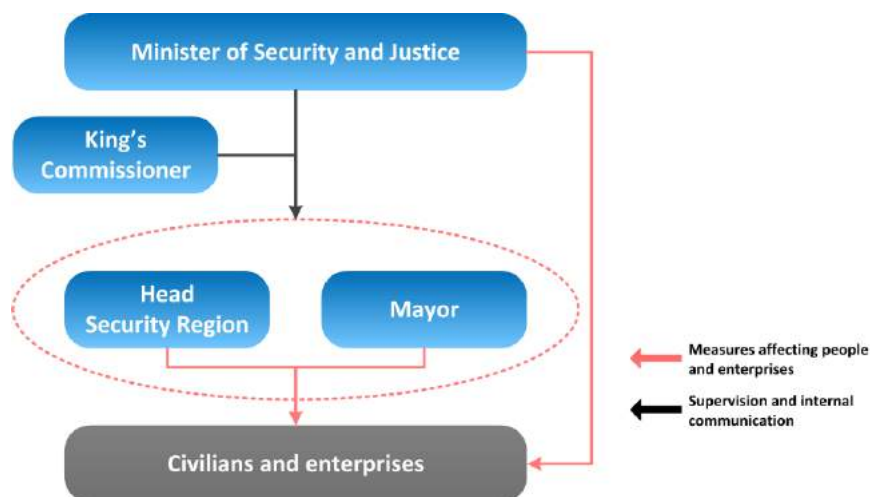


Figure 3.2: Organisation chart of general crisis management in the Netherlands¹⁷⁴¹

In the general chain crisis management is often bottom up. If the public order is violated the mayor or the head of the Security Region is the first body to act and take (counter-) measures. Depending on the geographical scope of the crisis one or more mayors and / or heads of the Security Region are involved and jointly they need to mitigate the effects of the crisis. The CdK can provide guidance to heads of Security Regions and the mayors if needed.

If the crisis turns out to be larger and the impacts are more severe the competence to manage the crisis can be transferred the Minister of Security and Justice. This can be done in a two-step approach. The first step allows the Minister to provide guidance that preferably needs to be followed-up by the mayor or head of the Security Region. In the second step the Minister will take over the competence and is sole responsible public body. In this case the regional crisis becomes a

¹⁷³⁹ This section is based on Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing

¹⁷⁴⁰ The Netherlands consist of 12 provinces, so in total there are 12 King's Commissioners. Depending in the location of the crisis, one or more commissioners will need to assist the Minister of Security and Justice.

¹⁷⁴¹ Source: Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing, edited by authors

national crisis. Example could be a large evacuation. The Minister is assisted by the National Crisis Centre (NCC) which is part of its Ministry.

The NCC has permanent staff available that guides the crisis management process. The NCC prepares the input for the interdepartmental decision making on civil servant level (for the ICCb) as well as on ministerial level (for the MCCb). The tasks can be divided over four themes:

- Information: collecting the factual information to establish what actual happened;
- Measures: translate the factual information in concrete actions that need to be undertaken;
- Communication: decide which communication strategy will be followed to inform the public;
- Scenario's: assess what might happen in the near future.

In case the crisis exceeds the competences of the Ministry of Security and Justice, and other Ministries are involved, the NCC will ensure communication between the Ministry of Security and Justice and the other ministries. They will contact all relevant departmental (crisis) coordination centres (DCC). The NCC is the main point of contact for all governmental bodies, including the Security Regions as well. If an emergency has occurred the NCC receives the requests for support and expertise. It should be noted that the NCC is not an additional layer in the organisational structure, but aims to be the central point of contact to ensure quick response from the national government.

3.1.2 Functional chain: specific crisis¹⁷⁴²

A crisis often relates to a specific functional area, e.g. flooding or a terrorist attack, and then the functional chain will act as well, next to the general chain. The public body that is able to take decisions is the Ministry responsible for that specific function. In case of a pandemic, the Ministry of Health, Welfare and Sport will be the main responsible Minister, beside the Ministry of Security and Justice that will handle the general crisis management. Mayors and the Heads of the Security Regions are only involved if they are part of that specific functional chain. If they are not, they do not become part of the crisis management system. The exact structure as well as the procedures followed can differ per functional chain. A set of functional chain maps (bestuurlijke netwerkkaarten) has been developed and is regularly updated. The complete set can be found at the Dutch website: <http://www.infopuntveiligheid.nl> which covers 22 specific maps.

Table 3.1: Overview of functional chain maps in the Netherlands

Functional chain maps crisis management			
1	Crisis management general and violation of public order	12	Emergency drinking water and emergency water
2	Medical assistance general	13	Food
3	Surface water and weirs	14	Electricity and gas
4	North Sea and maritime transport	15	Oil
5	Environment	16	Rail transport

¹⁷⁴² This section is based on Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing

Functional chain maps crisis management

6	Nuclear accident	17	Road transport
7	Infectious disease	18	Inland shipping
8	Animal disease	19	Civil aviation
9	Justice general	20	Social security
10	Terrorist attacks	21	Telecommunication
11	Scarcity general	22	Media

Source: <http://www.infopuntveiligheid.nl>

Contrary to the general chain, crisis management in a functional chain is top-down. The responsible Minister needs to take mitigating measures and the activities are managed by the relevant Departmental (Crisis) Coordination Centre (DCC). In case of a disaster the relevant Minister can obtain emergency powers after consultation with the Minister of Security and Justice. In this case the role of the Minister of Security and Justice is more limited and he mainly needs to be informed about the size of the crisis and the procedures taken. He will inform the Heads of the Security Regions as well as the mayors. The Minister of Security and Justice will only undertake more action if the crisis cannot be handled by the responsible Ministry only or once more functional chains become involved.

3.1.3 Coordination between the chains

If complex crisis occur more chains can be involved. The coordination becomes more complex and in this case the role of the Ministry of Security and Justice becomes larger. The general chain will be activated as well as the relevant functional chains. In this case there will be coordination on two levels. First of all, on the national level, i.e. between the relevant Minister and the Minister of Security and Justice. Secondly, coordination on regional level is needed, i.e. between mayors, heads of the Security Regions and other relevant organisations. Who is involved depends on the specific functional chain(s).

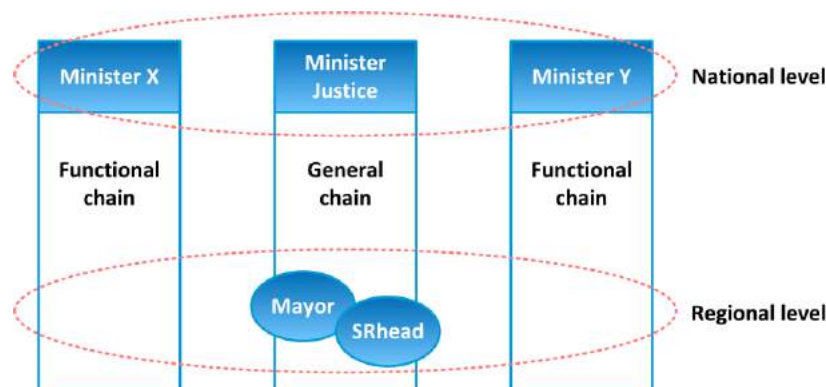


Figure 3.3: Organisational chart of complex crisis management in the Netherlands¹⁷⁴³

¹⁷⁴³ Source: Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing, edited by authors

The figure above shows the interaction between the two different types of chains and the coordination at both national and regional level. However this picture is not complete as it still mainly focuses on crisis coordination in one of the pillars, i.e. the functional chain for a specific crisis and the general chain in case of violation of public order. If the crisis becomes bigger the different chains need to cooperate and actions need to be coordinated. This coordination is done by the Interdepartmental Commission Crisis Management (ICCb) which is supported by the NCC (coordination in the general chain). The involved Ministries are part of the ICCb and jointly they decide how to handle the crisis. In case the national security is at stake crisis management is done by the Ministerial Commission Crisis Management (MCCb) where the involved Ministers come together under the chairmanship of the Minister of Security Justice. If the impacts of the crisis are so large, the Prime Minister will take over the chairmanship of the MCCb. Examples could be terrorist attacks and cases of war.

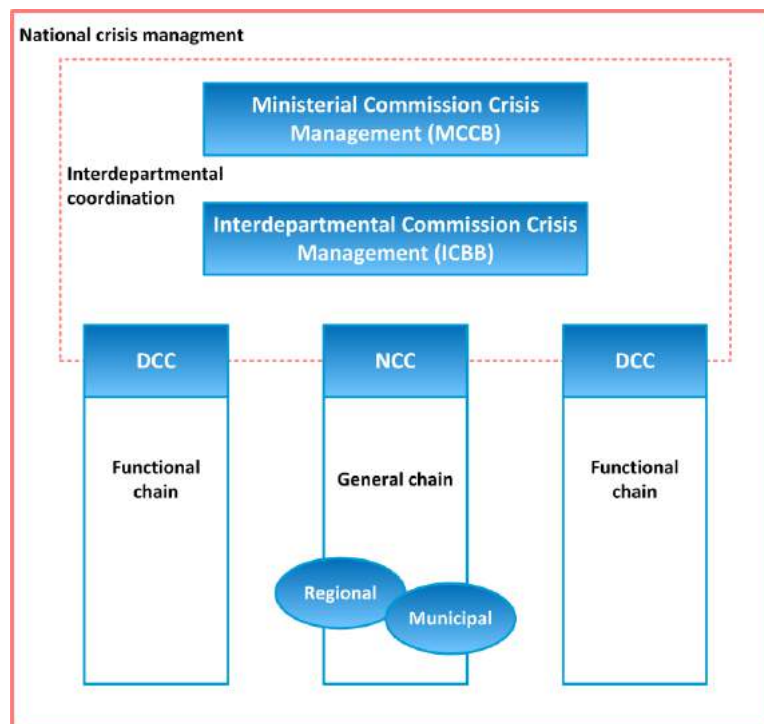


Figure 3.4: National crisis management and its actors in the Netherlands¹⁷⁴⁴

The actual operational guidance will be provided by the National Operational Coordination Centre (LOCC). The LOCC is also part of the Ministry of Security and Justice and can carry out its tasks 24/7 in case of threats and actual incidents, emergencies, disasters and large scale events. Some tasks of the LOCC are, amongst others:

- During a national upscaling of coordination:
 - Develop the national multidisciplinary operational overview;
 - Evaluate operational feasibility for administrative dilemma's and actions;
 - Develop national operational advice.
- The coordination of national and international support requests.
- Form, prepare and maintain the National Operational Staff (LOS).

¹⁷⁴⁴ Source: Infopunt Veiligheid (2012). De bestuurlijke aansturing van de crisisbeheersing, edited by authors

The National Operational Staff (LOS) is activated upon request by the chairman of the MCCb. The LOS is basically an up-scaled LOCC, including representatives of the police, fire brigade, health care, MOD and municipalities. The LOS needs to provide advice regarding the availability of people and equipment for national disaster and crisis management. The advice is based on the operational feasibility and consequences. The chair of the LOS could become part of the ICCb and MCCb if needed to explain the given advice.

Volunteers

Under all circumstances, irrespective if the general chain or the functional chain applies, the assistance of the volunteers can be requested. This holds especially for the volunteers of the Dutch Red Cross. They can provide first aid or supplies needed, e.g. blankets, clothes etc. It should be mentioned that the professional aid workers have the main responsibilities and should be able, under all circumstances to carry out their tasks. The support of the Dutch Red Cross is additional and if the emergency services indicate that the assistance of the volunteers is not needed, the volunteers need to comply with this request.

3.2 Organisational cooperation¹⁷⁴⁵

Dutch crisis management in a foreign crisis, with Dutch victims

If a crisis abroad occurs which affects Dutch citizens and requires measures to be taken **in the Netherlands** the Dutch crisis management system as described above is activated. So the Dutch Ministry of Security and Justice is the main responsible Ministry to take measures that will apply in the Netherlands. The Ministry is supported by the relevant Ministries depending on the specific sectors where measures need to be taken.

If a foreign crisis affects Dutch citizens **outside the Netherlands** and action in that foreign country is needed, the responsible Ministry is the Ministry of Foreign Affairs. The Ministry can offer local support to Dutch citizens or evacuate them if needed. In case of a large evacuation of Dutch citizens, the Ministry of Foreign Affairs is assisted by the NCC and competent Ministers, depending on the topic and crisis at hand. The Minister of Foreign Affairs is responsible for the evacuation process and bringing back citizens to the Netherlands. Once the citizens are back, the responsibility of the Ministry of Foreign Affairs is transferred. The Ministry of Security and Justice becomes responsible for generally managing the crisis, while specific ministries become responsible for everything that needs to be arranged that is part of their policy area. For instance, victims of a pandemic will be broad back to Dutch soil by the Ministry of Foreign Affairs. Once in the Netherlands, the Ministry of Health, Welfare and Sport needs to take appropriate measures ensuring that the victims are cured and the diseases not spread. The Ministry of Security and Justice has needs to keep the general overview. In all operations the leading criterion to assess the size of the support needed is not determined by the number of victims, but the societal impact the crisis has on Dutch society.

¹⁷⁴⁵ This section is based on Infopunt Veiligheid (2013), 'Internationale rampenbestrijding'

Humanitarian support in foreign crisis, no Dutch victims

Not in every crisis Dutch citizens become a victim. In case a crisis in a foreign country requires Dutch assistance, and humanitarian aid is required, the main responsible Minister is the Minister of Foreign Affairs. In joint cooperation with the NCC, other Ministers, the Embassies, the international organisations concerned and the authorities in the affected country, the Minister of Foreign Affairs decides on the type, amount and process of the offered humanitarian support. In the whole process the Minister of Foreign Affairs has the lead and is responsible for the coordination and communication.

General crisis support in foreign crisis

The Netherlands can also assist in general crisis management, without offering direct humanitarian support. In case the emergency occurred in the European Union the Minister of Security and Justice is responsible to organise international support, while the Ministry of Foreign Affairs is responsible for intervention in all non-EU countries.

If the request for help relates to civil protection it needs to be send to the NCC, which in this cases is the single point of contact. Both the request of the European Union Monitoring and Information Centre (EU-MIC) and the Euro-Atlantic Disaster Response Coordination Centre (EUDRCC) need to be addressed to the NCC. The NCC will inform the Ministry of Foreign Affairs as well as the LOCC (the national operational coordination centre). Also the requests of the United Nations (UN) need to be addressed to the NCC, however only the Ministry of Foreign Affairs will be informed. The NCC will indicate the period of time available for the Ministry and the LOCC to prepare the Dutch answer. The process followed to provide an answer is depicted in the figure below.

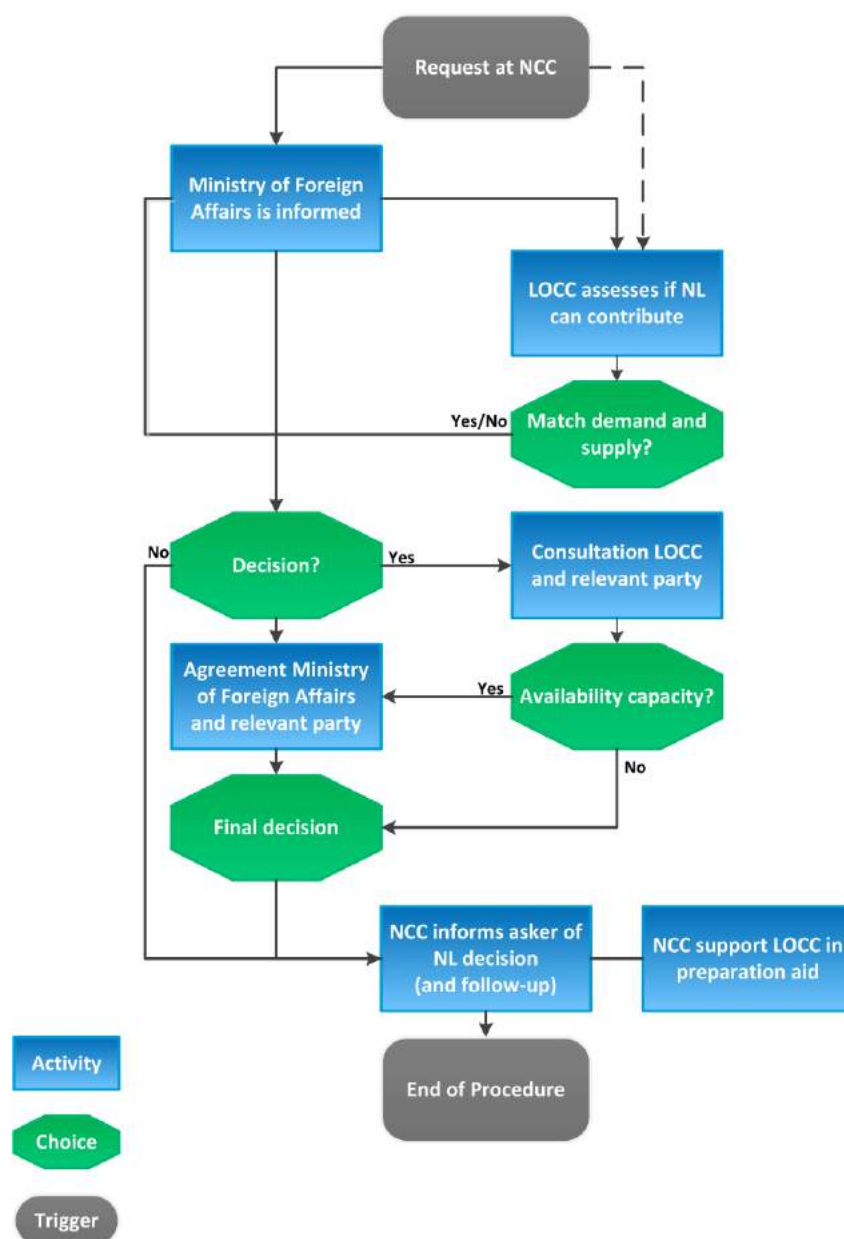


Figure 3.5: Decision making process to offer international support if requested¹⁷⁴⁶

Dedicated support to the United Nations

The UN can request support from the Netherlands in case of disasters happening in other countries. To activate the support the request needs to be addressed to the NCC and the framework presented above is followed. The main types of support that can be requested are UNDAC and USAR.

UNDAC¹⁷⁴⁷

The Netherlands is Member to UNDAC – United Nations Disaster Assessment and Coordination - since 1993. Experienced emergency managers are available for UNDAC to assist during a crisis. Depending on the type of crisis a manager is appointed. Since 2000 the Netherlands has provided assistance 18 times, for example in the 2010 flooding in Pakistan, the 2009 earthquake in Indonesia and 2008 flooding in Nepal.

¹⁷⁴⁶ Source: Nationaal Handboek Crisisbesluitvorming (2013), edited by authors

¹⁷⁴⁷ Source: UNDAC (2011), 'Emergency response missions'

USAR

The Netherlands also has an urban search and rescue team available. The team was added to the USAR list in 2003 and since 2007 the team is qualified as 'heavy'. This means that at least 55 experts are available (the Dutch team consists of 60 people) and the team can carry out complex technical search and rescue operations in collapsed or failed structures, with special attention for top steel structures. The team can assist in five fields: management, search, rescue, medical and logistic. The heavy team can assist during national crises, but on request can be deployed abroad as well. Requirements for the team are¹⁷⁴⁸:

A Heavy USAR Team:

- *Is required to have the equipment and manpower to work at a Heavy technical capability at two separate work-sites simultaneously. A separate work-site is defined as: any area of work that requires a USAR team to re-assign staff and equipment to a different location all of which will require separate logistical support. Generally an assignment of this sort would last greater than 24hrs.*
- *Is required to have both a search dog and technical search capability;*
- *Is required to have the technical capability to cut structural steel typically used for construction and reinforcement in multi-story structures;*
- *Must be able to conduct heavy rigging and lifting operations; and*
- *Must be adequately staffed and logistically sufficient to allow for 24 hour operations at 2 independent sites (not necessarily at the same two sites; the sites may change) for up to 10 days.*

¹⁷⁴⁸ Based on OCHA – INSARAG External classification/reclassification manual 2014

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

In the Netherlands the Handbook Support ('Handboek bijstand') has been published. Aim of the Handbook is twofold; to provide insight in the national crisis management system and to stimulate unambiguous handling of requests for support and assistance. The Handbook is managed by the National Operational Coordination Centre (LOCC), which has the obligation to check if the Handbook still complies with the current legislation and regulation and if the procedures described still reflect the current crisis management operations. The Handbook consists for four volumes each with its own scope:

1. Volume I: National support
2. Volume II: Support in cross-border crisis
3. Volume III: Incoming foreign support
4. Volume IV: Support in the Caribbean part of the Netherlands¹⁷⁴⁹

The content of the Handbook is evaluated on a yearly basis and during this evaluation it is checked whether or not the procedures, the legislation or other issues are still up-to-date. In case the Handbook no longer suffices, the Handbook needs to be revised. The head of the LOCC needs to monitor the evaluation process and needs to decide if a new version of the Handbook has to be published. The advisory board is responsible for the content and its revision. The Minister of Security and Justice needs to approve the new version. Once the revision is approved the LOCC needs to distribute the new version to as many different stakeholders as possible.

Volume I: National support¹⁷⁵⁰


After a general introduction in the first chapter, the second chapter of this volume defines the main terms (e.g. support and assistance) and indicates the main stakeholders, both on an administrative as well as an operational level. Also some general aspects, which apply to all assistance and support procedures, are explained. One of them is the division of the costs. General rule is that the stakeholder asking for assistance needs to pay for the costs made by the aid provider. However based on article 55 of the Security Regions Act the national government can also pay part of the costs if the Security Region files the request.

After Chapter 2 the different procedures are described in detail. Each chapter relates to a specific kind of support, often based on a specific act, e.g. support based on the Act for the police force or military support in case of the public interest. Each chapter has the same structure, starting with an introduction, which is followed by an overview of the current legal framework. Then the request procedures are described on a very detailed level, including an organogram, examples and an overview of the possible exceptions in the request procedures. If more than procedure is possible each procedure is described in this detailed manner. The descriptions are followed by an explanation

¹⁷⁴⁹ Not adopted yet, so no further information is provided.

¹⁷⁵⁰ Source: 'Handboek bijstand' – Volume I

In the Annexes the different Acts are included as well as the request forms and a list of products that could be used to file a better request.



Ministerie van Veiligheid en Justitie

Aanvraagformulier militaire steunverlening in het openbaar belang

In te vullen door aanvrager
Datum aanvraag
Aanvragend bestuursorgaan (kiezen uit Minister / CdK / Burgemeester of Dijkgraaf)
Titel van de aanvraag
Regeling militaire steunverlening in het openbaar belang (stcrt. 2008,3)
Reden van de aanvraag
Aanvrager kan zelf niet (tijdig) of afdoende in noodzakelijke steun (laten) voorzien omdat:
Aanvraag kan niet aan civiele marktpartij worden gegund omdat:
Of
Verklaring van geen bezwaar van betreffende branchevereniging toevoegen (n.v.t. indien aanvraag van minister komt)
Te verwachten taak / opdracht
Gewenste steunverlening (incl. aantallen)
Indien geen bekendheid met aantallen; welk effect wordt beoogd te bereiken met de steunverlening
Datum en tijd dat de steunverlening nodig is
Van: Tijdstip:
Tot: Tijdstip:
Mate van zelfvoorziening aangevraagde steunverlening (brandstof, voeding etc.)
Overige bijzonderheden
Plaats van opkomst: Tijdstip:
Plaats van Inzet:
Overig:

In te vullen door aanvrager
Naam en telefoonnummer van regionaal contactpersoon voor LOCC
Naam:
Telefoonnummer:
Naam en telefoonnummer van regionaal contactpersoon voor de steunverlenende defensie-eenheid
Naam:
Telefoonnummer:
Plaats en datum
Plaats:
Datum:
Naam aanvrager
Functie
Handtekening aanvrager (Minister / CdK / Burgemeester of Dijkgraaf)

De aanvraag wordt ingediend bij:

Het Landelijk Operationeel Coördinatie Centrum

locc@nctv.mirven.nl

Tel: 0343 - 53 69 53 (Piket)

Hoofdstraat 54, 3972 LB Driebergen,

Postbus 100, 3970 AC Driebergen

Figure 4.1: Example of a request form got military assistance¹⁷⁵¹

Volume II: Support in cross border Crisis¹⁷⁵²

Also volume II starts with two more theoretical chapters. Chapter 2 and 3 provide an overview of the applicable treaties between the Netherlands, Belgium and Germany as well as agreements and legal provisions that form the basis of the cross border assistance procedures between the countries. These chapters describe the administrative organisations and the relevant border regions in the three different countries.

Chapters 4 and 5 describe the operational side of the assistance. The chapters focus on the crisis management between the Netherlands and Germany. Both chapters relate to the situation where Germany is asking the Netherlands for assistance and vice versa. Chapters 6 and 7 describe the same

¹⁷⁵¹ Source: 'Handboek bijstand' – Volume I

¹⁷⁵² Source: 'Handboek bijstand' – Volume II

for the situation between the Netherlands and Belgium. Also here both situations are described separately. Both chapters provide detailed information for the police, fire brigades, and emergency health care. Schematic overviews are presented as well.

In the Annexes to the volume some examples of request forms are presented as well as the texts of the main treaties between the Netherlands & Germany and the Netherlands & Belgium.

Volume III: Incoming foreign support¹⁷⁵³

This volume is the shortest one of the three volumes currently in force. This volume describes under which conditions foreign emergency services can provide assistance in the Netherlands. It describes how the different Dutch actors in crisis management should request assistance, how the coordination and communication with the foreign units should be organised, what happens to the responsibilities of the Dutch actors in the crisis management system and how the details, e.g. cost allocation, need to be arranged.

4.2 Operations planning

4.2.1 National crisis plans

In the Netherlands several specific national crisis plans are in place. Each national crisis plan (NCP) is based on the national guide for decision making (see chapter 2) and incorporates at least the structures set out in the Security Regions Act and the Act on the police force. Each NCP relates to a specific topic that requires additional planning. Examples are the NCP for ICT, the NCP for high water levels & flooding, the NCP for Electricity and the NCP for radiation incidents.

Not for all specific topics a NCP is made. NCPs are often written when the general structures described in the national guidance and the ‘bestuurlijke netwerken’ are not detailed enough. All plans written follow more or less the same structure. They start with defining the exact scope of the document to indicate which emergencies do fall under the scope of the plan and which do not. The document also defines for whom the document is written. This description is followed by an overview of the applicable legislation (other than the Security Regions Act and the Act on the police force) or an overview of the authorities and actors involved. For each of the actors their roles in the crisis preparedness, response and recovery are described as well as a detailed description of their relationships. For each of the actors also their legal justification, why are they allowed to take certain measures, is given.

After this description an overview of the crisis management structure is provided. This description often only mentions the additional actors in the crisis management process. The general actors, as described in chapter 3 of this report, are often not mentioned in detail. The NCP really focuses on the additional actors and their tasks. The additional structure of crisis management is also visualised. In the description not only attention is paid to the operational responsibilities, but also the decision making process is elaborated on.

¹⁷⁵³ Source: ‘Handboek bijstand’ – Volume III

In the more recent versions also guidelines with regard to communication, both risk communication (before a crisis has happened) and crisis communication, are provided. These plans also provide guidance on quality management, focusing on the updating of the current plans and they provide guidance for training and educational programmes.

4.2.2 Departmental crisis plans

During the desk research and interviews no link to the existence of departmental crisis management plans has been found. This is not very surprising, considering the structure of the Dutch crisis management system. As explained in several other parts of this country study, the main operational crisis management is organised on a local level, through the Security Regions. These regions to have crisis plans in place (see next paragraph).

If a crisis concerns more than one Security Region the national system is activated. Depending on the type of crisis only the general chain or both the general chain and specific chain(s) become operative. As described in the paragraph above the specific chains to have their own NCPs in place, which give a detailed account of the procedures to be followed. There is no need to further develop plans on a departmental level, as they would more or less copy the content of the NCPs¹⁷⁵⁴.

4.2.3 Regional / Local crisis plans

Based on the Security Regions Act each Security Region needs to have three documents in place that are used in their crisis management system:

1. Their risk profile (art. 15);
2. Their policy plan (art. 14);
3. Their crisis plan (art. 16).

In the risk profile the management of the Security Region, led by the Head of the Security Region, an overview of the most risky situations is made. It provides an overview of all possible fires, disasters and crisis that can occur in the region and an assessment is made regarding the possible risks. The final profile is made after discussion of the profile in the individual municipal councils. Also the head of the police force, representatives of the Waterschappen and other relevant crisis partners are asked to provide their insights. The risk profile is the basis for the policy plan and needs to be made at least every for years.

Secondly, the management of the Security Region needs to establish a policy plan based on the above mentioned risk profile. The policy plan needs to be updated at least once every four years (article 14.1) and the plan needs to describe to proposed operational performance of all actors involved, including fire brigade, police force, health care and municipalities, in case a disaster or emergency occurs (article 14.2a). The performance relates to the number of people, equipment and time available. The plan should also indicate if national guidelines are followed and how this is done as well as an informative paragraph for all operational actors involved. The plan should contain an

¹⁷⁵⁴ Based on interviews held.

exercise/training plan describing how the yearly, compulsory exercises look like and how they will be evaluated. A last point that needs to be included is a description of the non-legal advice function and coverage plan for arrival times of the fire brigade. The policy plan needs to be tuned with neighbouring Security Regions, the police force and the relevant Waterschappen.

The third document that needs to be established by the management of the Security Region is the actual crisis plan. Also this plan needs to be established at least every four years. The plan needs to contain a description of the organisation, the tasks, the responsibilities and the powers which apply in disaster mitigation and crisis management. Also the additional agreements made with the relevant municipalities are included in the plan. Agreements with neighbouring Security Regions with regard to support, cooperation and adjustment with crisis management actors are included. Finally the agreements with neighbouring countries, if applicable, need to be added to the plan as well.

During the evaluation of the Security Regions, in 2013, it was concluded that all 25 regions have risk profiles, policy plans and crisis plans in place. All policy plans are based on the risk profiles made. Although all Security Regions have these documents in place, the content of the documents is not always of the required level. Most risk profiles are not yet fine tuned with neighbouring regions and some are not actual enough. Overall the policy plans more or less comply with all requirements laid down in the Security Region Act, however only four comply fully. The requirements for the crisis plans are more or less fulfilled by all¹⁷⁵⁵.

4.3 Logistics support in crises

During the desk research as well as the interviews no clear indications have been found that private logistical providers are often used in crisis management. They do not form a clear part of the crisis management chain.

*Military logistical support*¹⁷⁵⁶

Traditionally the Dutch Army was the back-up option in the Dutch crisis management system. However this has changed since the signing of a Covenant between the Army and the government in 2005, which was rapidly extended in 2006. The Covenant Civil-Military Administrative Agreements (CMBA) has been concluded between the Ministry of Interior, the Ministry of Defence and the Ministry of Security and Justice.

One of the outcomes of the Covenant is, is that in principle the capacity of the Army can be fully used during times of crisis, however the Army cannot agree on full availability, e.g. some of the troops are on a peace mission. The Army has guaranteed that at least 4,600 soldiers are permanently available to help if needed. The Army can assist by:

- Structural capacity → Coast guard, Royal military police, Special support units, Explosive Ordeal Disposal teams (EOD) and the emergency hospital.

¹⁷⁵⁵ Source: Ministry of Security and Justice (2013)

¹⁷⁵⁶ Source: Ministry of the Interior and Kingdom Relations (2007)

- Random capacity → need to be requested by the administrative powers, e.g. security and surveillance during evacuation, transport for evacuation, firefighting helicopters, and decontamination capacity.

The Army can assist in transport during crisis. They have different modes on offer, e.g. boats, planes and trucks, which can be used to transport people, but also animals. In case of an evacuation of citizens the Army can, within 48 hours, provide 350 tracked and wheeled vehicles. With this capacity the army is able to move 3,000 evacuees together with their luggage, move 40 tonnes of cargo and 200 evacuees at the same time through inaccessible areas.

As stated earlier the government needs to request these transport services from the Army. In the Handbook Support, Volume I is laid down how this procedure works (see par. 4.1).

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

4.4.1 Crisis communication¹⁷⁵⁷

In case of a national crisis concerning public safety the National Core team Crisis Communication (Nationaal Kernteam Crisiscommunicatie = NKC) is responsible for the communication, both to the press and public. The NKC decides what the communication strategy will be for the specific crisis at hand. The NKC is led by the Director Communication of the Ministry of Security and Justice, who is assisted by the Director of the Communication unit of the NCC and the press & public communication team, led by an appointed coordinator. The press & public communication team consists of speech writers working for the Ministry of Security and Justice (for content related information) as well as dedicated crisis communication experts working for the NCC (for knowledge on how to communicate in times of crisis)

If the crisis does not only concern public safety and so other Ministries are involved in the crisis management as well, the press & public communication team is extended with speech writers of the other involved Ministries for additional content related information. The Communication Directors of the other Ministries will assist the Communication Director of the Ministry of Security and Justice to ensure that the relevant and correct information is communicated.

It can happen that a crisis not only affects the Netherlands, but also other Member States. In that case the NKC will be extended with civil servants of the Ministry of Foreign Affairs, as the Ministry of Foreign Affairs is the competent Ministry for cross-border crisis. In that case the press & public communication team will consist of speech writers of the Ministry of Foreign Affairs and their Director of Communication will be involved as well. Jointly the NKC will inform the Dutch public and will ensure communication with foreign authorities.

¹⁷⁵⁷ Source: National Centre Terrorism and Security (2013), 'Informatie Nationaal Kernteam Crisiscommunicatie (NKCC)'

Tasks executed by the NKC in case of a crisis are:

- Determine the communication strategy on a national level;
- Advising the AT, ICCB and the MCCB on the consequences of the chosen communication strategy as well as the communicative consequences of decisions;
- Develop, coordinate and (partly) executing the communication towards the press and public;
- Inform other public bodies about the communication activities of the Central Government and to coordinate the communication between the Central and regional/local government;
- Monitor and analyse media, internet and public perception.

The NKC is only active once a crisis emerges. NKC start activities if the National Centre Terrorism and Security (Nationaal Coördinator Terrorismebestrijding en Veiligheid = NCTV) request the NKC to take up activities again, or the Communication Director of the Ministry of Security and Justice deems it necessary to do so. The NKC can also be activated if a competent Minister requests the re-activation, taking into account the scope of the crisis. The actual decision to reactive the NKC is made by at least the Head of the Coordination unit of the NCC and the Communication Director of the relevant Ministry.

4.4.2 Public information and warnings

Incidents related to national security are monitored continuously. On the website of the NCTV the actual level of threat can be found. The NCTV is constantly updating the status and explaining why the status has been changed. Additional information on that current status and the implications for the individual can be found on their website, as only for that level of threat additional information is available in order to reduce confusion¹⁷⁵⁸.

For other types of emergencies no continuous communication is used. However if the responsible Ministry feels the need to start communicating on a specific topic they can do this by a press release.

*Risk and crisis barometer*¹⁷⁵⁹

A more general instrument to inform the public on crisis situations is the risk and crisis barometer. To fill the barometer interviews with Dutch citizens are held to ask them if they feel safe, what type of threats they fear and so on. The outcomes are published on the website of the NCTV. The barometer is held twice a year on a national level, but it is possible to create a barometer for another level as well. A request should be submitted to the NCC (please refer to chapter 1 for more information).

4.4.3 Alert systems

Several instruments can be used to inform the public in case of a crisis. The main instruments are:

- The air raid;
- The website www.crisis.nl;

¹⁷⁵⁸ Source: <https://www.nctv.nl/>

¹⁷⁵⁹ Source: National Centre Terrorism and Security (2014)

- The phone number: 0800-1351;
- NL-Alert.

Air raid

The instrument is used to warn the public directly of any disaster or emergency is the air raid. Once something has happened the competent authority can request that the air raid is used and citizens are requested to go inside as soon as possible, and to close all doors and windows in their building. They are also advised to turn on radio or TV, to receive further instructions and be updated on the current situation. The air raid was, for example used, during a large fire in a chemical plant in Moerdijk in January 2013. People in the direct surrounding of the plant were warned that something was wrong. To ensure that people know what to do when the air raid goes, the national government held an extensive campaign informing people and the procedures and the aims of the air raid. To make sure that the system works in case of an emergency the system is monthly checked by sounding the air raid throughout the country. During the public campaign it was announced that every first Monday of the month at 12.00 AM the air raid system is tested.

www.crisis.nl¹⁷⁶⁰

The website is only active if there is a severe risk that a crisis will occur or once a crisis has emerged. To start the website the authority responsible for managing the crisis, i.e. local, regional, ministerial or national, should request the usage of the website by the NCC. The launching of the website in case of a specific crisis depends on the time the requesting authority needs to provide the web editor with the specific content. The website can only be used to inform the public during times of crisis and cannot be used as a permanent tool to inform the public on crisis related topics. This information needs to be published on other websites.

The website is linked to social media and updates on the website can be transferred to the dedicated Twitter account (@crisisupdate_NL) or Facebook page (www.facebook.com/crisis.nl). The website can also show Twitter messages which are preselected. For example messages from the Twitter account of the mayor of the town in which a large emergency takes place can be shown on the website.

0800-1351¹⁷⁶¹

The NCC can also open, upon request, the dedicated phone number in case of an emergency. The phone number aims to relieve the pressure of municipalities, regions and Ministries by answering the general questions on their behalf. The number can be reached 24/7. During office hours it is possible to activate the number within an hour; outside office hours it will take two hours before the phone number is activated. Before opening the lines the requester needs to submit standard answers to the personnel answering the questions, in order to ensure harmonized answers and one signal to the public. Although the NCC does not write the standard answers they can provide advice and examples. They also advise on the number of staff needed to answer the phones.

NL Alert¹⁷⁶²

¹⁷⁶⁰ Source: Factsheet www.crisis.nl

¹⁷⁶¹ Source: Factsheet 0800-1351

NL-Alert is a text messaging service which can be used once a disaster has occurred. All mobile phones located in a certain area around the place where the emergency has happen and which have installed the NL-Alert app will be contacted. The owner of the phone receives a text message telling him/her what has happened and what he/she can do best, for instance going inside a building and close all doors and windows. The system always works, even when the network is over compensated. The service is provided free of charges. The app is installed automatically at more and more phones, however on some phones the owner still needs to install it. This can be done through the website nl-alert.nl



Figure 4.2: Screen shot of the NL-alert website¹⁷⁶³

¹⁷⁶² Source: <https://www.nl-alert.nl/>

¹⁷⁶³ Source: <https://www.nl-alert.nl/>

5 Capabilities

5.1 Human resources

The Netherlands does not have any permanent disaster management staff available. All people involved in crisis management do have other tasks as well, which they carry out in case no emergency occurs. For some of the actors involved the tasks they carry out during a crisis are more or less similar to their regular work. This holds for police officers, firemen and people working in health care. For others, especially civil servants, their regular activities differ from activities they need to carry out during a crisis.

The only institute with permanent staff is the NCTV, which is led by the national coordinator Terrorism prevention. The NCTV has a small staff available that daily monitor the level of threat and that could easily respond in case a threat is identified. Apart from the NCTV no other organisation is permanently focused on crisis management¹⁷⁶⁴.

Although no permanent emergency staff is available, people can be easily mobilized as the operational actors do have staff permanently available to execute the tasks assigned to these actors, irrespective crisis management activities. Fire brigades, police forces and health care institutions, have divided their employees in day and night shifts and these employees can be called-up when if necessary.

The Dutch Rescue Brigade consists of around 5,000 volunteers¹⁷⁶⁵, which can be easily mobilized. The Dutch fire brigade consisted of 25,983 fire fighters in 2012 of which 20,804 are volunteers¹⁷⁶⁶. Also the Dutch Red Cross has many volunteers available, around 35,000¹⁷⁶⁷. If these three categories are added up around 61,000 volunteers are presented in the Netherlands. Besides those registered volunteers, many more citizens want to be involved, the so-called civilian aid (in Dutch: burgerhulp). Depending on the disaster and its size many people are willing to help.

Besides the professional actors and volunteers also the private sector could be involved in crisis management. The actors in the private sector are very diverse and range from electricity companies to telecom providers as well as from transportation companies and chemical industry. According to the Vademecum DG ECHO the following private actors could be involved:

Table 5.1: Large private industry players to involve in crisis

Sectors	Industry players
Energy	Nuon, Liander, Essent, Oxxio, Eneco, Electrabel, RWE

¹⁷⁶⁴ Based on interviews

¹⁷⁶⁵ Source: <https://www.reddingsbrigade.nl/wie-zijn-wij/>

¹⁷⁶⁶ Source: Brandweerstatistiek 2012

¹⁷⁶⁷ Source: <http://www.rodekruis.nl/afdeling/gooistreek/dit-doen-we/hulp-bij-rampen/vrijwilliger-rampenhulpverleners>

Sectors	Industry players
Telecom / ICT	UPC, KPN, Ziggo, Orange, Ben, T-mobile, Getronics, Koning & Hartman
Drinking water	Dunea, Evides, Oasen, Vitens, PWN, WML, Waternet
Food	Friesland Campina, Univeq, Puratos, Pepsico, Alpro, CSM, Makro
Health care	Hospitals, care home, alternative practitioners
Finance	ABN-AMRO, Rabobank, SNS, ING
Legal	Lawyers
Transportation	Connexion, NS, Veolia, HTM, GVB, RET
Chemical industry	Shell, AKZO-Nobel, MSD, Solvay, VSM

Source: Vademecum, DG ECHO, country profile: the Netherlands

5.2 Materiel (non-financial) resources

Non-financial resources

Crisis management is in principal organised at a local level. As the operational responsibilities lie with the Security Regions they have the equipment needed in place. According to the Security Region Act, article 10, each Security Region needs to purchase and manage the common equipment needed. However, the emergency services themselves will purchase the equipment they need. The equipment they use is not only used in case of large disasters, but can also be used during their daily execution of their tasks. So the fire brigade needs to buy, e.g. the ladder trucks and the fire hoses, while the medical health care needs to purchase the ambulances, stretchers and medicines.

The national government does not have specific resources available as they have hardly any operational responsibility. During larger crisis the national government can take over the coordination and decision making role, however they will not provide the actual help. This will still be done by the emergency services and if necessary accompanied by the Army¹⁷⁶⁸.

Permanent reserve stock

The permanent reserve is also not managed by the national government. Some of the reserve stock needed belongs to the Army, e.g. tents. Main actor in the crisis management system that has permanent reserves available is the Dutch Red Cross. In the Royal Decree Red Cross 1988 it is fixed that the Dutch Red Cross has emergency supplies available and in case of an emergency they can provide tents, blankets and medicines.

Besides professional organisations, citizens are also advised to have their own reserve stock available. On the website www.denkvooruit.nl each citizen can find the relevant information on reserve stock. The websites advises to have at least the following products at hand: radio with batteries, additional batteries, torch, first aid kit with handbook, matches, tea lights, warming blanket, emergency whistle and a toolbox. Also fresh water and canned food should be in the house. Citizens can choose to buy the individual parts of the advice permanent stock, but they can also

¹⁷⁶⁸ Based on interviews.

order packages on-line. The national government has certified one website (www.hetnoodpakket.nl) where each citizen can buy an approved emergency package. The site offers pre-selected small, basic and extra large emergency packages, but it is also possible to select the items that you want to have included.

Involvement of military assets¹⁷⁶⁹

Traditionally the Dutch Army was the back-up option in the Dutch crisis management system. If the civilian emergency services were no longer able to provide the aid needed, the Army could be involved. Since the century this has been changing and the Army has become more and more one of the partners that always responds to a national or large crisis. In 2005 Covenant Civil-Military Administrative Agreements (CMBA) has been concluded between the Ministry of Interior, the Ministry of Defence and the Ministry of Security and Justice.

In 2006 the Covenant was extended with the additional agreements with regard to specialist defence capabilities. After extensive research the CivMil cooperation (ICMS) has been established. In the ICMS the Army guarantees the support of at least 4,600 soldiers in case of emergency as well as the availability of goods. In the catalogue Civil Military Agreements (2007) an extensive overview is provided of all support the Army can provide during a crisis as well as which assets can be used. The catalogue is jointly published by the Ministry of Interior and the Ministry of Defence.

Possibility to commandeer private goods

Under 'normal' conditions the national government has not the ability to commandeer or use private goods and the national government should make use of the goods currently owned by the emergency services. However if the state of emergency is proclaimed the national government might have the ability to commandeer the goods. The government can choose to only use the goods or become the owner.

In the state of emergency some of the dedicated emergency laws become active. For the commandeering private goods the Claim Act (Vorderingswet, 1962) needs to come into force. After the proclamation of the state of emergency, the Prime Minister needs to issue a Royal Decree stating that this specific act is re-activated. After adopting the Royal Decree he needs to inform the Parliament about the expected duration and he needs to send them a law in which this is included. The Parliament needs to adopt this law. If they reject the Royal Decree is annulled. If the law is adopted private goods could be commandeered (article 3).

The Claim Act only allows Ministers to claim goods. All other public bodies do not have the competence to claim any goods. If they need private goods they need to ask the responsible Minister, depending on the type of goods and for what they are needed, to claim the goods for them (article 3a). Based on the Claim act both physical goods, e.g. cars, houses etc., as well as property rights, as long as they do not belong to foreigners (article 1).

¹⁷⁶⁹ Source: Ministry of the Interior and Kingdom Relations (2007)

5.3 Training

5.3.1 Exercises for crisis management

Local, departmental and national

Main reason to practise every year is based on the fact that the people involved in crisis management are carrying out other activities during their 'normal' work. They are not dedicated to crisis management only. For some of the organisations and persons involved the tasks carried out during a crisis are connected to the activities carried out during their day-to-day work, e.g. police, fire brigade and health care. This does not hold for all, e.g. civil servants perform other activities that are not directly linked to crisis management. They need to be well prepared to respond adequately in case of a crisis. Based on the Act establishing the Security Regions each Security region is obliged to practise once every year. The exercise should focus on the entire disaster management chain and after each exercise should be extensively evaluated. Beside this legal obligation to practise, especially between the main crisis partners, covenants have been closed between the Security Regions and vital actors that might play a crucial role in crisis management. These covenants also introduce the obligation to practise with each vital private partner as well. Depending on the number of covenants and partners the number of exercises can increase considerable.

Based on an agreement between the Security Regions and the national government each two years a training exercise is organised involving several Security Regions and the national government. Aim of these trainings is to develop the relevant skill set for larger crises and disasters. Overall the number of exercises carried out by Security Regions is quite intense.

Also each department is obliged to have a yearly exercise. The exercise needs to fall with the scope of the relevant department and needs to follow the so-called 'netwerkkarten' (see Chapter 1). So each of the 22 functional chains is practising once a year. Also once a year a dedicated exercise is organised aiming to test the procedures within several departments. The exercise has a specific theme and the whole scenario is acted out.

Cross-border exercises¹⁷⁷⁰

The Netherlands also partakes in cross-border training exercises. Most frequently potential disasters and crisis are practiced with neighbouring countries; Belgium and Germany. Between the Netherlands and Belgium an agreement has been made to hold an exercise every year. The entire training cycle is three years and consists of three different exercises: a table top exercise, an alerting exercise and an operational exercise. Before the actual exercise is held a crisis scenario is written and the different stakeholders are informed that an exercise will take place. The main outlines of the fictive disaster are communicated, however the details remain secret. The exercises focus both on the operational and administrative level. After each exercise the exercise is evaluated and the SOPs are updated if needed.

¹⁷⁷⁰ Source: Nationaal Coördinator Terrorisme bestrijding en Veiligheid (2014 #3)

5.3.2 Centralised training in crisis management¹⁷⁷¹

National crisis management falls under the responsibility of the Ministry Security and Justice. The Minister needs to ensure that the right people are appointed to the crisis where they can assist best and everyone needs to be aware what to do and when. This assumes that civil servants working for the NCC, the several departments, but also other important public organisations and private parties are adequately trained. The National Academy for Crisis management (NAC), which is part of the NCTV, is the responsible actor to ensure sufficient education and training of all the people and parties involved in national crisis management. The program has been intensified during recent years, as crises become more complex and diverse.

In all trainings provided by the NAC the main thought is that all people involved in crisis management need to be educated, trained and have to practise in the same way. They also need to think in similar ways, adopted the same principles and apply the same rules in order to understand each other and minimise possible misunderstanding between actors involved in preventing or mitigation a disaster. The common understanding will enable the Dutch crisis management system to operate as a flexible system, where all actors can perform other tasks as well (outside the crisis situation), but are familiar enough with each other and each other's working procedures to be able to respond to a crisis effectively.

The training program offered by the NAC is provided at different levels:

- **Individual:** educational programmes to obtain knowledge of and develop competences for different roles within the crisis management system.
- **Team:** educational programmes and training for a specific team aiming to improve cooperation, processes and methods.
- **Teams within internal chain:** exercises and training within the internal chain (i.e. functional chain), focused on cooperation, substantive connection and the usage of each other's output and products.
- **The external chain:** exercises with vital public and private partners both home and abroad.

All four training types follow the so-called OTOTEL-cycle¹⁷⁷² (Educate, train, practise, test, evaluate and lesson's learned) as depicted in the figure below. The goals of each training are focused on information exchange (between the national government, departments and vital public and private partners), crisis communication, providing advice and decision making. Each training is formed around a specific theme that is important at that specific moment. Recent trainings relate to the change of rule in 2013 or the Nuclear Security Summit in 2014 to be held in The Hague.

¹⁷⁷¹ This section is based on <https://www.nctv.nl/onderwerpen/crisisbeheersing/nac/>

¹⁷⁷² opleiding, trainen, oefenen, testen, evalueren en leren van lessen

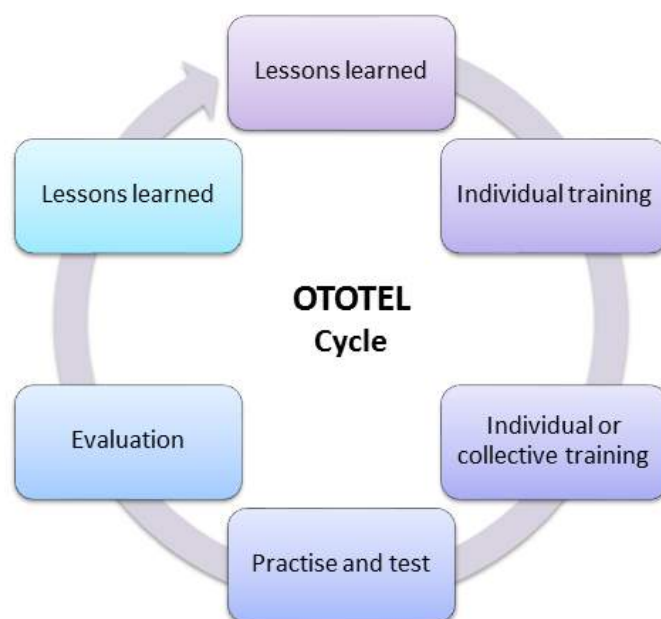


Figure 5.1: Steps in the OTOTEL cycle¹⁷⁷³

5.3.3 Training of volunteers

The registered volunteers receive their basic training from the organisation they are assisting. Depending on the organisation the numbers of trainings differ. Volunteers registered at the Dutch Red Cross often only have to follow the compulsory first aid training, for which they obtain a certificate of completion. Red Cross volunteers are obliged to renew their certificate every 2 years in order to be aware of the most relevant and newest knowledge available¹⁷⁷⁴.

Volunteers at the Dutch rescue service get training through the Dutch Rescuing Brigade (Reddingsbrigade Nederland). The organisation has dedicated trainings in place and depending on the position for which the volunteer has signed up he will receive a package of trainings. Also the knowledge needs to be regularly renewed. For example, the organisation offers one-week training to become a life saving beach guard. During the trainings the most common situations are practised and swimming trainings are delivered. Most volunteers need to partake regularly in condition and swimming trainings¹⁷⁷⁵.

The training requirements for volunteers joining the fire brigade are more extensive and strict. Besides a first aid training volunteers need to following trainings to get acquaintance with the usual procedures within the fire brigade. Also several tests need to be carried out and by failing these tests the person cannot become a volunteer. Examples are a swimming test, a psychological test and medical assessment. The performance of the volunteers is evaluated on a yearly basis. In order to get promoted the volunteers need to succeed for national exams, e.g. a more extended swimming

¹⁷⁷³ Source: Nationaal Coördinator Terrorisme bestrijding en Veiligheid (2014 #3), edited by authors

¹⁷⁷⁴ Source: <http://www.rodekruis.nl/afdeling/gooistreek/dit-doen-we/hulp-bij-rampen/vrijwilliger-rampenhulpverlener>

¹⁷⁷⁵ Source: <https://www.reddingsbrigade.nl/wie-zijn-wij/>

certificate and obtaining additional skills. The requirements are quite severe as the volunteers get a compensation for their work done¹⁷⁷⁶.

5.4 Procurement

5.4.1 European regulations

The procurement of public contracts needs to be in line with the principles of European treaties and especially with the free movement of goods services, capital and people. Furthermore the procurement needs to comply with the principles of equality, proportionality etc. For some types of procurement additional regulations are codified in directives. Within the European legislation, three different procurement directives apply. These directives are mutually exclusive meaning only one of the directives applies to the public procurement. Directive 2014/25/EU (on procurement of utilities) and directive 2009/81/EC (on procurement in the defence and security industry) are topic specific. If these specific directives do not apply, public sector directive 2014/24/EU is applicable, which is the replacement of directive 2004/18/EC. The aim of the new directive is to simplify the rules on public procurement; improve the participation of SMEs and stimulate cross border joint procurement.

Stimulation of cross border joint procurement is helpful in case of a major internal crisis or a cross border crisis. The directive states in the preamble that contracting authorities should be able to choose to jointly provide their public services in cooperation with other authorities, without being obliged to use any legal form. These services don't have to be identical. The cooperation does not require all participating authorities to fulfil the obligations of the contract, as long as there is a commitment to contribute to the cooperative performance. The preamble points out that there are difficulties in cross border joint procurement. Therefore new rules have to be made. In these rules, the conditions for cross border procurement have to be clarified, as well as the applicable regulations. In addition, contracting authorities should be able to set up joint entities established under national or EU law. The new rules are specified in article 39 of the regulations.

If the procurement is executed by a centralised purchasing body located in another MS, the procurement shall be conducted in accordance with the national regulations of the MS where the purchasing body is located. In addition, several contracting authorities from different MS may jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system. Participating contracting authorities will then conclude an agreement that determines all responsibilities of the parties and the internal organisation of the procedure. As said before, the contracting authorities can set up a joint entity. The parties shall decide on the applicable rules on procurement. They can choose the rules of the MS where the entity has its registered office or where the entity carries out its activities.

This project evolves around the procurement related to crisis management, for example the procurement of ambulances, emergency packs or trainings. The utilities directive applies to gas and heat, electricity, water, transport services, ports and airports and postal services (article 8-13). The directive on defence and security applies to supply of military equipment and sensitive supplies. The

¹⁷⁷⁶ Source: Brandweer Rotterdam Rijnmond (2012)

majority of procurement in crisis management will be procured by normal NCCs and local authorities like the fire department or police and will not be secret. So in most cases the public sector directive (2014/24/EU) is applicable. This chapter will therefore focus on this directive. Keep in mind that the other directives can also be applicable, for example if the army is used to solve a major crisis. The directive is addressed to Member States and has no direct effect on the national regulations. The directive needs to be implemented first.

Scope of the public sector directive

The public sector directive applies to procurement by contracting authorities with respect to public contracts as well as design contests whose value is estimated to be not less than (article 4):

- € 5.186.000 for public works contracts;
- € 134.000 for public supply and service contracts and design contests, awarded by central government;
- € 207.000 for public supply and service contracts or design contests awarded by sub-central contracting authorities.
- € 750.000 for public service contracts for social and other specific services listed in Annex XIV.

This directive should not apply to certain emergency services where they are performed by non-profit organisations or associations, since the particular nature of those organisations would be difficult to preserve if the service providers had to be chosen in accordance with the procedures of the directive. Furthermore the directive does not apply to public contracts with the purpose of providing public communication networks or electronic communication services; public contracts organised pursuant to international rules; several types of service contracts, e.g. rental, legal services and employment contracts and service contracts based on exclusive rights; and last, public contracts between entities within the public sector (articles 8-12).

Award procedures

On a European level, procurement is executed by the European Commission. The public sector directive contains several award procedures:

- open procedure,
- restricted procedure,
- competitive procedure with negotiation,
- competitive dialogue,
- negotiated procedure without prior publication.

The *open procedure* applies when no other procedure is chosen. In the open procedure, the contracting authority submits a call for tenders. Interested companies may submit a tender. The best offer is chosen, based on the selected award criteria (article 27).

The *restricted procedure* consists of two phases. In the first phase a call for expression of interests is set out. Interest candidates may submit an invitation to tender. The contracting authority will then

invite the most suitable candidates to submit a tender. The contracting authority will award the contract to the best tender, based on the selected award criteria (article 28).

In the *competitive procedure* with negotiation any interested candidate may submit a request to participate in the negotiations, in response to a call for competition. In this call for competition, the contracting authority has provided a description of their needs and the characteristics of the works or services to be procured. Only the interested candidates that are invited may submit an initial tender, which will be the basis of the negotiations (article 29). In several cases the negotiation procedure can be used without prior publication, for example when the public contract contains a creative achievement; when there is no competition; when intellectual property rights need to be protected, or when there are reasons for extreme urgency (article 32).

In the *competitive dialogue* any interested candidate can submit a request to participate in response to a contract notice given by the contracting authority. The contract notice provides the information on and the needs and requirements of the contracting authority, as well as the chosen award criteria. The selected interested candidates will join the competitive dialogue, in which the means best suited for satisfying the contract will be defined (article 30).

A new procedure within this directive is the *innovation partnership*. In this procedure, any economic operator may submit a request to participate in response to a contract notice, by providing information for qualitative selection that is requested by the contracting authority. The innovation partnership can be set up with one partner or several partners. Only the economic operators invited by the contracting authority participate in the procedure. After each phase, the contracting authority may decide after each phase to terminate the partnership or reduce the number of partners within the partnership, based on the targets.

According to article 26, the open procedure and restricted procedure are the standard procedures to apply in case of procurement. The other procedures can be used in a limited number of situations, for example when the service is innovative, or when the technical specifications can't be determined (art. 26, sub 4.).

Contracting authorities can use framework agreements, provided that they apply the procedures in this directive. The agreement can not exceed four years. Contracts within the agreement will be awarded according to the rules in article 33.

In most procedures the candidates are chosen with the use of selection criteria. The selection criteria may relate to suitability to pursue the professional activity; economic and financial standing and technical and professional ability. All criteria need to be related and proportionate to the matter of the contract (article 58).

5.4.2 *National regulations*

Member States need to implement directive 2014/24/EU before 18 April 2016. In the Netherlands, part of the new directive is already implemented in the new act on procurement (in Dutch:

‘Aanbestedingswet’) and the regulations on procurement (in Dutch: ‘Aanbestedingsreglement’), which is implemented in 2013.

Act on procurement

The scope of the procurement law is first defined by the value of the works. The law refers to the values as stated in the public procurement directive. The law refers to the old public procurement directive, but states that a change in the articles in the directive has priority over the national law (section 2.1.1).

Not all types of public contracts need to be procured. Public contracts to which the defense directive applies are excluded. Moreover, contracts are excluded: if it is secret; if it is about telecommunication or if other procedures apply, based on international agreements. (article 2.23). Besides these types of public contracts, the procurement law excludes several public contracts, based on the content of the contract (article 2.24)¹⁷⁷⁷.

Procedures

In the Netherlands, procurement is executed by the central government and all the ministries. Within the ministries, the different agencies are authorized for procurement. The extensive list of all the bodies is codified in Appendix I of the directive.

Section 1.2.2 of the procurement law notes several special principles for European procurement. This section also states that the procurement should take place without discrimination of the interested candidates and that the contracting authority needs to act transparent. Furthermore the procurement needs to be in line with the principles of proportionality and subsidiarity. The law explicitly states that the selection criteria for candidates in other countries have to be equal to the selection criteria of national candidates. These principles are then repeated in the section on national procurement.

Just as in the public procurement directive, the act states that the standard procedures for procurement are the public procedure and the restricted procedure (article 2.25). Both procedures are in line with the procedures in the directive.

In case the open and restricted procedure are not suitable for a complex public contract, the contracting authority can use the procedure of competitive dialogue. The procurement is expected to be complex when the contracting authority is not able to define the technical measures that are necessary, or can not specify the legal or financial terms of the contract. This is only a limited number of options compared to the EU directive. For the other criteria named in article 26 of the EU directive, the act determines the competitive procedure with negotiation should be used (article 30). According to the act, the negotiation procedure without publication applies in the same situations as stated by the EU directive (article 2.32 – 2.36).

¹⁷⁷⁷ For example legal services and rental services

Since the new EU directive is not yet implemented in the Netherlands, the act still makes a distinction between II-A and II-B services. For B services, a different procedure can be used. This is based on the list of services in annex II of the old direct 2004/18/EG.

All procedures are explained more precisely in the regulations on procurement, which is in line with the European directive.

The selection criteria are stated in article 2.90 of the procurement law. These criteria are comparable to the criteria in the EU directive. The only difference is that the minimum turnover the economic operators are required to have shall not exceed three times the contract value, while this is two times according to the directive.

5.5 Niche capabilities

One of the focus points of the Netherlands which could be interesting for EU crisis management is the experience with flooding. The Netherlands has a long history of flooding as large parts of the country are located below sea level and the four largest cities of the country are located in these areas. Since the large flooding of 1953 which killed 1863 Dutch people (2,395 in total), The Netherlands has worked on an extensive prevention program, the so-called Deltawerken programme.

In the first years after the flooding the main focus was directed towards physical prevention matters. Many dykes were raised in order to protect the land located nearest to the sea and many sea entrances were permanently or temporarily closed. In the Eastern Schelde a permanent bridge containing several locks has been built. The locks allow vessels to sail between the inland waters and the sea, however if the sea level tends to rise too high, the locks can be closed to keep the water out. An example of a temporary solution is the Maeslandkering near Rotterdam (the last major physical structure of the Deltawerken, completed in 1997). This construction consists of two big lock doors that are located at the left and right bank of the River Maas. Normally the doors are open and vessels can use the waterway freely. In case water levels are expected to rise and form a threat for Rotterdam the lock doors can be closed.



Figure 5.2: Impression of the works in the Eastern Schelde (left) and the Maeslandkering (right)¹⁷⁷⁸

¹⁷⁷⁸ Source: pictures taken from wikipedia

After completion of this large physical works in 1997 the focus on the protection of the people against the sea remained. Frequently, often once a year, the height of all dykes is assessed and if dykes fall under a certain height the dykes need to be raised. The Deltaworks and the dyke management are mainly carried out in the West of the country. However the Netherlands has also many rivers that might cause sufficient flooding. In order to manage the water levels throughout the country, many water installation pumps (in Dutch: *gemaal*) have been build. If the Water Agency (In Dutch: *waterschap*) measures higher water levels then desired, they can use the pump installations to redistribute the water amongst rivers, lakes and eventually the sea.

The expertise developed during the years is not only used for the own protection, Dutch experts are also exporting their knowledge to other countries that face similar flooding issues. A recent example is the team of Dutch experts advising the US on how to better protect their coastal regions, after the devastating hurricane Kathrina. A group of experts visited the US to assess which measures can be taken and to advise the competent US authorities. Also a site visit in the Netherlands had been organised to the US team the possibilities.



Figure 5.3: Location of all measures taken in the Delta Programme (red lines)¹⁷⁷⁹

¹⁷⁷⁹ Source: <http://www.deltawerken.com/Deltawerken/16.html>

Resources

Legislative acts

- Agreement between the Netherlands and Germany on mutual assistance in combating disasters, including serious accidents of Bonn 1988
- Agreement between the Netherlands and Germany on cross border police action and the cooperation in criminal matters of Enschede 2006
- Bilateral agreement between the Provinces of Luik (Belgium) and Limburg (the Netherlands)
- Bilateral assistance plan between the Provinces Noord-Brabant (the Netherlands) and Limburg (Belgium) of Den Bosch 1992
- Council Decision of 8 November 2007 establishing a Community Civil Protection Mechanism
- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations.
- Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC.
- Directive 2014/24/EU of the European Parliament and of the council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.
- Prüm Convention of 27 May 2005 on the stepping up of cross-border cooperation, particularly in combating terrorism, cross border crime and illegal immigration
- Treaty between the Kingdom of the Netherlands and the Kingdom of Belgium on mutual assistance in combating disaster accidents of the Hague 1984
- Treaty between the Kingdom of Belgium, The Kingdom of the Netherlands and the Grand Duchy of Luxembourg on cross border police action
- Wet van 12 december 1929, houdende regelen betreffende den rechtstoestand van ambtenaren
- Wet van 29 november 1962, houdende een regeling tot het tegengaan van het hamsteren van goederen in buitengewone omstandigheden
- Wet van 5 december 1962, houdende regeling van het vervoer te land en op de binnenwateren in buitengewone omstandigheden
- Wet van 12 december 1962, houdende een regeling betreffende het vorderen van zaken door de landsoverheid
- Wet van 25 mei 1978, houdende regelen inzake voorzieningen op het gebied van het financiële verkeer in buitengewone omstandigheden
- Wet van 14 februari 1992, houdende nieuwe bepalingen met betrekking tot gemeenten
- Wet van 3 april 1996, houdende regeling met betrekking tot uitzonderingstoestanden (Coördinatiewet uitzonderingstoestanden)

- Wet van 3 april 1996, houdende hernieuwde vaststelling van de Wet buitengewone bevoegdheden burgerlijk gezag ter aanpassing aan de Coördinatiewet uitzonderingstoestanden (Wet buitengewone bevoegdheden burgerlijk gezag)
- Wet van 3 april 1996, houdende hernieuwde vaststelling van de Oorlogswet voor Nederland ter aanpassing aan de Grondwet en aan de Coördinatiewet uitzonderingstoestanden (Oorlogswet voor Nederland)
- Wet van 25 mei 1998, houdende regels over tegemoetkoming in de schade en de kosten in geval van overstromingen door zoet water, aardbevingen of andere rampen en zware ongevallen (Wet tegemoetkoming schade bij rampen en zware ongevallen)
- Wet van 6 juli 2000, houdende regels inzake de bescherming van persoonsgegevens (Wet bescherming persoonsgegevens)
- Rijkswet van 2 december 2004, houdende instelling van een Onderzoeksraad voor veiligheid (Rijkswet Onderzoeksraad voor veiligheid)
- Wet van 11 februari 2010, houdende bepalingen over de brandweezorg, de rampenbestrijding, de crisisbeheersing en de geneeskundige hulpverlening (Wet veiligheidsregio's)
- Wet van 12 juli 2012 tot vaststelling van een nieuwe Politiewet (Politiewet 2012)
- Wet van 1 november 2012, houdende nieuwe regels omtrent aanbestedingen (Aanbestedingswet 2012) (in English: act on procurement)

Other normative acts

- Aanbestedingsreglement Werken 2012, Reglement voor het aanbesteden van opdrachten voor werken en aan werken gerelateerde leveringen en diensten, Staatscourant 2013 nr. 3075 (In English: regulations on procurement).
- Benelux 2009, Ordination of the Committee of the Benelux with respect to cross border first response ambulance services
- Besluit van 22 december 1988, houdende vaststelling van een algemene maatregel van rijksbestuur tot regeling van de vrijwillige hulpverlening aan gewonden, zieken, krijgsgevangenen, geïnterneerden en anderszins hulpbehoevenden door erkende en toegelaten verenigingen
- Besluit van 20 juni 1994, houdende nadere regels met betrekking tot de informatieverzorging en de te verstrekken informatie inzake rampen (Besluit informatie inzake rampen en crisis)
- Besluit van 1999, houdende vaststelling van het Besluit risico's zware ongevallen 1999
- Besluit van 24 juni 2010, houdende regels inzake de organisatie en de taken van de veiligheidsregio's en de gemeentelijke brandweer, alsmede de financiële bijdrage van het Rijk (Besluit veiligheidsregio's)
- Besluit van 24 juni 2010, houdende regels over het personeel van de brandweer, functies voor de bedrijfsbrandweer, functies binnen de GHOR en functies binnen de organisatie van de rampenbestrijding en de crisisbeheersing en het overleg over het personeel van de brandweer (Besluit personeel veiligheidsregio's)
- Besluit van 2 december 2011, houdende wijziging van het Besluit Rode Kruis 1988, onder meer ter codificatie van de auxiliaire rol en van twee taken van het Rode Kruis, opnemings van een verwijzing naar een protocol en aanpassing aan gewijzigde verantwoordelijkheden

- Cross border cooperation plan by disasters and severe accidents between the regions Noord and Oost Gelderland, Twente, Grafschaft Bentheim and the district Borken
- Cross border assistance plan of Technisches Hilfswerke, Landesverband Nordrhein-Westfalen, for support in the Netherlands at daily activities in the fire brigade regions Twente, Noord and Oost Gelderland, Gelderland Midden, Limburg Noord en Zuid Limburg
- Disaster protocol and handbook disaster protocol Euroregion Scheldemond
- Euroregional disaster plan for the Euroregion Maas-Rhine-North
- Memorandum of understanding between the Netherlands, Belgium and Luxembourg to cooperate in the area of emergencies with possible cross border effect of Senningen 1996
- Understanding on cross border support for health, fire brigade, technical and specific assistance in the Euroregion Maas-Rhine

Official documents (white papers, strategies, etc.)

- Analistennetwerk Nationale Veiligheid (2013), 'Nationale risicobeoordeling 2012'
- Central Bureau for Statistics (2012), 'National government spends 13.4 billion on public order and safety'
- Central Bureau for Statistics (2013), 'Brandweerstatistiek 2012'
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- Infopunt veiligheid (2013), 'Internationale rampenbestrijding'
- Infopunt Veiligheid (2013), 'Sociale media: informatiebron en communicatiekanaal'
- LOCC (2010), 'Handboek Bijstand, deel 2: Grensoverschrijdende bijstandsverlening'
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- Ministry of the Interior and Kingdom Relations (2007), 'Catalogus Civiel-Militaire Samenwerking'
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- Ministry of Security and Justice (2012), 'Zelfevaluatie-instrument: Handreiking evaluatie systeem oefeningen en GRIP3/4-incidenten'
- Ministry of Security and Justice (2013), 'Brochure Wet Veiligheidsregio's'
- Ministry of Security and Justice (2013), 'Staat van de rampenbestrijding 2013'
- Ministry of Security and Justice (2013), 'Rijksbegroting 2014 VI Veiligheid en Justitie'
- National Centre Terrorism and Security (2013), 'Nationaal Handboek Crisisbesluitvorming'
- National Centre Terrorism and Security (2013), 'Factsheet 0800-1351'
- National Centre Terrorism and Security (2013), 'Factsheet www.crisis.nl'
- National Centre Terrorism and Security (2013), 'Informatie Nationaal Kernteam Crisiscommunicatie (NKC)'
- National Centre Terrorism and Security (2014), 'Risico- en crisisbarometer'

- National Institute for Public Health and the Environment (2013), 'National risk assessment 2011'
- National Institute for Public Health and the Environment (2013), 'National risk assessment 2012'
- Nederlands Instituut voor de Veiligheid (2013), 'Bestuurlijke netwerkkaarten crisisbeheersing'
- UNDAC (2011), 'Emergency response missions'
- United Nations Office for the Coordination of Humanitarian Affairs (2014), 'INSARAG External Qualification / Reclassification Manual'

Online resources (e.g. websites of key CM organizations)

- <http://emdat.be/>
- <http://www.bnr.nl/nieuws/996322-1408/nederlandse-dijken-niet-op-orde-investering-van-15-miljard>
- <http://www.car-uwo.nl/onderwerpenindex/brandweervrijwilligers/algemene-bepalingen/werkingssfeer>
- <http://www.crisis.nl/wees-voorbereid.aspx>
- <http://www.deltawerken.com/Deltawerken/16.html>
- www.imergis.nl
- <http://www.infopuntveiligheid.nl/Publicatie/Dossier/80/regionaal-crisisplan.html>
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- https://www.ivenj.nl/onderwerpen/rampenbestrijding/wettelijk_kader/
- <https://www.nctv.nl/>
- <https://www.nctv.nl/onderwerpen/nv/strategie-nationale-veiligheid/>
- <https://www.nl-alert.nl/>
- <https://www.reddingsbrigade.nl/wie-zijn-wij/>
- <http://www.rijksoverheid.nl/documenten-en-publicaties/persberichten/2009/07/10/kabinet-regelt-slagvaardige-besluitvorming-bij-crisis-en-rampen.html>
- <http://www.rodekruis.nl/afdeling/gooistreek/dit-doen-we/hulp-bij-rampen/vrijwilliger-rampenhulpverlener>
- <http://www.veiligheid.org/risicobeeld.html>

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- Andersson Elffers Felix (2013), 'Evaluatie Wet Veiligheidsregio's
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- IPSOS (2014), 'Risico- en Crisisbarometer – basismeting juli 2014'
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- National Crisis Centre (2010), 'Visie op sociale media en crisiscommunicatie'
- Onderzoeksraad voor veiligheid (2013), 'Voor veiligheid'
- University of Utrecht (2013), 'Analysis of Civil Security systems in Europe (ANVIL) - Country study: the Netherlands'

Expert interviews

Please only mention here the organisation and month of the interview. Only refer to "expert interview" in the text.

- Inspection for Security and Justice, part of the Ministry of Security and Justice
 - *Interview held: November 2014*
- National Centre Terrorism and Security (NCTV), spoken to the National Coordination Centre (NCC), part of the Ministry of Security and Justice
 - *Interview held: December 2014*



Driving Innovation in Crisis Management for European Resilience

POLAND

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Vesselin Petkov, Todor Tagarev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

- Poland is a country in the eastern part of Central Europe with an area of almost 312 000 sq. km. Poland is an almost unbroken plain reaching from the Baltic Sea in the north, to the Carpathian Mountains in the south.
- The Polish crisis management system is a complex architecture which is still under construction. The heavy floods of 1997, 2001 and 2010 exposed significant shortcomings in the Polish crisis management system and prompted a series of legal and institutional reforms.
- In Poland, there is no single authority dealing with disaster management. The structure of the Polish emergency management has five levels: state, ministry (central government body), province (voivodeship), county (powiat) and district (commune, gmina). The national fire-fighting and rescue efforts are the pivotal part of the crisis management system of the country. The Chief Commandant of the State Fire Service, under the supervision of the Minister of the Interior, is the central body of the state administration responsible for the organisation and management of those activities.



Figure 4: Symbol of the Polish State Fire Service.

- Several services and structures also support or make part of the wider Polish crisis management system, including (but not limited to): the Police; the Border Guard; the State Inspection for Environment Protection; the Institute for Meteorology and Water Management; the National Atomic Energy Agency; the mining rescue stations; the maritime search and rescue service; the naval rescue service; NGOs, e.g. Mountain Volunteer Rescue Service; Tatra Mountains Volunteer Rescue Service; Water Volunteer Rescue Service; Mazurian Rescue Service and others.
- The role of the private sector in the civil security system is limited, while NGOs are important and cooperate closely with the state institutions. The Volunteer Fire Service is the biggest part of the volunteer sector in Poland.

Table of Contents

P O L A N D Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1248
Overview	1249
Table of Contents	1250
List of Figures	1252
List of Tables.....	1252
List of Abbreviations.....	1253
1 Policy	1255
1.1 Risk Assessment	1255
1.2 Policy and Governance	1260
1.2.1 Strategy scope and focus	1260
1.2.2 Monitoring and analytical support to policy making; R&D	1261
1.2.3 Policy for Prevention	1262
1.2.4 Policy for Preparedness	1262
1.2.5 Policy for Response	1263
1.2.6 Policy for Relief and Recovery	1263
1.3 Financing	1263
1.3.1 Investing in preparedness	1263
1.3.2 Investing in consequence management	1264
1.4 Policy review, Evaluation & Organisational Learning	1264
1.4.1 Post-Disaster Assessment	1264
1.4.2 Departmental Lessons Learned systems	1264
1.4.3 Centralised (national) Lessons Learned system	1264
1.4.4 International exchange for Lessons Learned	1265
1.4.5 Regular policy reviews	1265
1.5 Resilience	1266
1.6 Information sharing and data protection	1266
2 Legislation	1267
2.1 Crisis (emergency, disaster) management concept.....	1267
2.2 General crisis (emergency, disaster) management law.....	1267
2.3 Emergency rule	1267
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1268

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1269
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1270
2.7	Legal regulations for international engagements of first responders and crisis managers	1270
3	Organisation	1273
3.1	Organisational chart.....	1273
3.2	Organisational cooperation	1277
4	Procedures	1279
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1279
4.2	Operations planning	1280
4.3	Logistics support in crises	1280
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1280
5	Capabilities	1281
5.1	Human resources	1281
5.2	Materiel (non-financial) resources	1281
5.3	Training	1282
5.4	Procurement	1282
5.4.1	Procurement regulation	1282
5.4.2	Procurement procedures	1283
5.5	Niche capabilities	1283
	Resources	1284
	Legislative acts	1284
	Official documents (white papers, strategies, etc.)	1285
	Online resources	1285
	Publications	1286
	Expert interviews	1286

List of Figures

<i>Figure 1: Symbol of the Polish State Fire Service.</i>	1249
<i>Figure 2: Risk Mapping of Poland.</i>	1255
<i>Figure 3: Structure of the PSP.</i>	1275
<i>Figure 4: Organisation of the Government Crisis Management Centre.</i>	1277

List of Tables

<i>Table 1: Classification of Risks</i>	1256
<i>Table 2: The most affecting (in terms of financial damage) disasters in Poland for the period 1900 – 2014.</i>	1256
<i>Table 3: The most affecting (in terms of people killed) disasters in Poland for the period 1900 – 2014.</i>	1256
<i>Table 4: Summarised table of natural disasters in Hungary between 1900 and 2014.</i>	1257
<i>Table 5: Crisis Management Levels in Poland</i>	1273
<i>Table 6: Levels of Crisis Management with Responsible Actors</i>	1274

List of Abbreviations

BDOT	Topographic Objects Database
CAR	Central Reporting Application
CEI	Central European Initiative
CEUDIP	Central European Disaster Prevention Forum Platform
CNBOP-PIB	Scientific and Research Centre for Fire Protection
CTIF	International Association of Fire and Rescue Service
DSM	Digital Surface Model
DTM	Digital Terrain Model
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EFA	European Fire Academy
EFDR	European Forum for Disaster Risk Reduction
EU ERCC	Emergency Response Coordination Centre
EU MIC	EU Monitoring and Information Centre
FEU	Federation of the European Union Fire Officer Associations
GCS	Government Security Centre
GFFV	Ground Forest Fire Fighting using Vehicles
GOPR	Mountain Volunteer Search and Rescue
HCP	High Capacity Pumping
INSARAG	International Search and Rescue Advisory Group
ISOK	IT System of the Country's Protection against Extreme Hazards
JHA	Justice and Home Affairs
JRC	[EU] Joint Research Centre
KWSiA	National Contamination Detection and Alerting System
MOPR	Mazurian Volunteer Search and Rescue
NCMP	National Crisis Management Plan
NFRS	National Firefighting and Rescue System
NPDRR	National Platform for Disaster Risk Reduction
OCHA	UN Office for Coordination of Humanitarian Affairs
PECO	Pays d'Europe Centrale et Orientale
PPL	Act on Public Procurement
PRiOL	Rescue and Civil Protection Program
PSP	Państwowa Straż Pożarna (State Fire Service)

SMOK	System Monitoringu i Oslony Kraju
TOPR	Tatra Volunteer Search and Rescue
UNECE	United Nations Economic Commission for Europe
WOPR	Water Volunteer Search and Rescue

1 Policy

1.1 Risk Assessment

In 2007 the Joint Research Centre's Institute for the Protection and Security of the Citizen published a report on "Risk Mapping in New Member States,"¹⁷⁸⁰ a result of research carried out within the 5th and 6th Framework Programmes, aiming, among others, at examining the existing situation in the 10 PECO (standing for Pays d'Europe Centrale et Orientale; French for Countries of Central and Eastern Europe) countries for mapping of eight priority natural (floods, forest fires, storms, earthquakes, landslides) and technological hazards (industrial installations, transport of dangerous goods and contaminated lands).

According to the report, qualitative self-evaluation by Polish experts shows that the eight hazards have been classified, as follows:

- Carrying high risk - floods, forest fires and transport of dangerous good;
- Carrying medium risk - chemical, contaminated lands, pipelines, transboundary pollution, storms; and
- Carrying low risk - landslides and earthquakes.

Figure 2 below provides a graphic representation of the risk mapping.

Countries	Floods	Indust. Install.	Transport of Dang. Goods	Forest Fires	Contaminated Lands	Storms	Earthquakes	Landslides
Romania	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH	HIGH	HIGH
Bulgaria	MEDIUM	HIGH	HIGH	HIGH	LOW	MEDIUM	HIGH	MEDIUM
Czech Republic	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	LOW	MEDIUM
Poland	HIGH	MEDIUM	HIGH	HIGH	MEDIUM	MEDIUM	LOW	LOW
Hungary	HIGH	MEDIUM	HIGH	MEDIUM	MEDIUM	LOW	LOW	LOW
Slovenia	HIGH	MEDIUM	LOW	MEDIUM	LOW	LOW	HIGH	MEDIUM
Slovakia	HIGH	HIGH	LOW	LOW	HIGH	LOW	LOW	MEDIUM
Latvia	MEDIUM	HIGH	HIGH	MEDIUM	LOW	LOW	n/a	n/a
Estonia	LOW	MEDIUM	HIGH	MEDIUM	LOW	MEDIUM	LOW	LOW
Lithuania	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	MEDIUM	LOW	LOW
Cyprus	LOW	MEDIUM	LOW	MEDIUM	LOW	LOW	MEDIUM	LOW

Legend

HIGH	
MEDIUM	
LOW	
n/a	NOT APPLICABLE

Figure 5: Risk Mapping of Poland.

¹⁷⁸⁰ "Risk Mapping in the New Member States," JRC Scientific and Technical Reports, available at: http://www.preventionweb.net/files/5455_JRC38184.pdf.

From a methodological point of view, the JRC project relates “high risk” with a hazard that is present within the vast majority of the country (more than 2/3 of it) or, alternatively, when the hazard is confined only to particular areas but in case of an accident, the effect could be significant for at least one major population centre or an important economic resource.

Table 2: Classification of Risks

Type of risk	Territory	Population/resource affected
High risk	HR>2/3	Major population centre
Medium risk	1/3<MR<2/3	Minor population centre
Low risk	LR<1/3	No population centre affected

Floods

As evident from statistical data tabled below (Table 2), floods have been the most affecting in terms of financial damage to the country's economy.

Table 3: The most affecting (in terms of financial damage) disasters in Poland for the period 1900 – 2014.

Disaster	Date	Damage (000 US\$)
Flood	3/7/1997	3500000
Flood	17/05/2010	3080000
Flood	20/07/2001	700000
Flood	May-87	500000
Storm	18/01/2007	100000
Flood	22/06/2009	100000
Flood	Jan-82	53000
Storm	24/01/1990	50000
Storm	1/3/2008	50000
Storm	4/12/1999	10000

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium," Created on: Sep-11-2014. - Data version: v12.07

Table 4: The most affecting (in terms of people killed) disasters in Poland for the period 1900 – 2014.

Disaster	Date	No Killed
Extreme temperature	1/11/2009	298
Extreme temperature	10/10/2001	270
Extreme temperature	Nov-10	200
Extreme temperature	Oct-05	191
Extreme temperature	Oct-02	183

Extreme temperature	Oct-99	154
Extreme temperature	1/12/2012	101
Extreme temperature	Dec-00	84
Storm	6/7/1928	82
Extreme temperature	1/11/2008	82

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium," Created on: Sep-11-2014. - Data version: v12.07

Table 5: Summarised table of natural disasters in Hungary between 1900 and 2014.

		# of Events	Killed	Total Affected	Damage (000 US\$)
Earthquake (seismic activity)	Earthquake (ground shaking)	1	-	1050	-
	ave. per event		-	1050	-
Extreme temperature	Cold wave	15	1650	-	-
	ave. per event		110	-	-
	Extreme winter conditions	1	191	-	-
	ave. per event		191	-	-
Flood	Unspecified	1	-	1000	-
	ave. per event		-	1000	-
	Flash flood	2	30	15700	700000
	ave. per event		15	7850	350000
	General flood	10	83	351874	7233000
	ave. per event		8.3	35187.4	723300
Storm	Unspecified	4	20	-	51100
	ave. per event		5	-	12775
	Extratropical cyclone	4	11	1060	160000
	ave. per event		2.8	265	40000
	Extratropical cyclone (winter storm)	2	7	53	50
	ave. per event		3.5	26.5	25
	Local storm	5	91	1292	7900
	ave. per event		18.2	258.4	1580
Wildfire	Forest fire	2	35	-	-
	ave. per event		17.5	-	-

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium," Created on: Sep-11-2014. - Data version: v12.07

White Book

Elements of strategic risk assessment related to natural disasters could be found in the White Book on National Security of the Republic of Poland,¹⁷⁸¹ which has been published in 2013. The White Book represents the outcome of the Polish National Security Strategic Review. The Book assesses the state of Poland's security system, and provides policy recommendations. The White Book defines the challenges related to disasters caused by the man or natural catastrophes as an element that shapes the internal security landscape in Poland. According to the document, areas of high-risk human activity, such as power engineering and extracting industry, and environmental interferences, increase the chance of occurrence of events with disastrous effects.¹⁷⁸²

As regards disasters caused by natural factors, the White Book expects "ever more frequent violent weather phenomena." The document specifically mentions the risk of extensive floods, adding that their frequency may grow in the next 5-10 years, which – "given deficiencies of the protection infrastructure" – would cause even more significant losses to the state and the citizens.

National Crisis Management Plan

The National Crisis Management Plan (NCMP, latest version as of 2013)¹⁷⁸³ is elaborated and updated by the Government Security Centre (GCS) and it is publicly available in Polish language. Pursuant to the Act on Crisis Management, Part I of the Plan identifies threats to Polish security and provides a risk assessment, as well as on critical infrastructure. The following threats are assessed in the Plan (in order of listing):

- Floods
- Disease outbreaks
- Chemical contamination
- Interruption of electricity supply
- Interruption of liquid fuels supply
- Interruption of gas deliveries
- Severe frosts
- Storms
- Forest fires
- Epizootic
- Mass plant diseases
- Collapse of buildings
- Landslides
- Drought
- Radioactive contamination
- Social unrest
- Terrorist threat

¹⁷⁸¹ Website of White Book on National Security of the Republic of Poland, www.spbn.gov.pl/sbn/english-version/5043,English-version.html.

¹⁷⁸² Website of White Book on National Security of the Republic of Poland, www.spbn.gov.pl/sbn/english-version/5043,English-version.html.

¹⁷⁸³ Krajowy Plan Zarządzania Kryzysowego (National Crisis Management Plan), in Polish, http://rcb.gov.pl/?page_id=302.

- Cyber threats

Information on potential threats in Poland are sent daily from the local level to the regional and the ministerial crisis management centres, which forward them to the GCS. The collected and processed data is prioritised, catalogued and aggregated into daily and problem-specific reports by the GCS.

Report on Threats to Security

In addition to that, in July 2013 a report (classified as confidential) on the threats to national security was adopted, identifying the most significant threats to national security and to risks stemming from them.¹⁷⁸⁴ The document also includes strategic objectives and projects to be implemented to minimise potential risks and their consequences. The report of 2013 identified 53 risks and scenarios that could affect the security and the international status of the country. The report analysed risks related to terrorism, major risks of natural or industrial origin (e.g. floods, epidemics, epizootics, chemical pollution, drought, reduction of the supply of electricity, reduction of the supply of liquid fuels). On the basis of the report, a national plan for emergency management is adopted.

On the basis of the list and description of threats in the plan it is possible to determine the most frequent threats in Poland, their location, probability of occurrence and potential effects on the population, environment and infrastructure.¹⁷⁸⁵

Also in terms of risk assessment, a national project called ISOK deserves mention, which is aimed at ensuring an efficient system for the country's protection against extreme hazards (supporting local planners), with focus on flood risk management. The products of the project carried out by the National Water Management Authority, the Institute of Meteorology and Water Management, the Head Office of Geodesy and Cartography at the National Research Institute, the National Institute of Telecommunications, and the government security centre, include the following:

- flood hazard maps and flood risk maps;
- IT system of ISOK;
- report on identification of national information systems;
- preliminary flood risk assessment;
- meteorological hazard maps;
- other hazard maps;
- Topographic Objects Database (BDOT);
- Digital Terrain Model (DTM) and Digital Surface Model (DSM);
- Digital Elevation Model Management System;
- digital orthophotomap;
- map of hydrological division of Poland in the scale 1:10 000.

Overall, national risk assessment is aimed at achieving forecasting accuracy of time and location as well as intensity of unfavourable or severe natural phenomena with enough lead time for prevention activities to eliminate or reduce threat.¹⁷⁸⁶

¹⁷⁸⁴ "Raport o zagrożeniach bezpieczeństwa narodowego," Website of the Government Security Centre, in Polish, http://rcb.gov.pl/?page_id=3702.

¹⁷⁸⁵ Paulina Pajkiert Vela, "Strengthening the Legal and Policy Framework for International Disaster Response in Poland," Website of the Polish Red Cross, http://www.ifrc.org/docs/IDRL/Poland-%20Strengthening%20the%20Legal%20and%20Policy%20Framework%20for%20International%20Disaster%20Response_09%20APR%202014.pdf.

In terms of assessing transboundary risks, Poland cooperates actively with neighbours and other countries in the region along legal, organisational, technical aspects lines to identify relevant institutions; to exchange information about threats in border areas and such concerning relief and recovery measures of the effects of extreme hazards; and to prepare effective and simple procedures for co-ordinated response. The cooperation takes the form of bilateral agreements and of international agreements under the auspices of the United Nations. Examples of the latter include the United Nations Economic Commission for Europe, the Council for the Baltic Sea States, the Central European Initiative and the UN Office for the Coordination of Humanitarian Affairs (which includes INSARAG – International Search and Rescue Advisory Group).

The cooperation is coordinated by the Ministry of the Interior and the Ministry of Foreign Affairs, with key participation of the fire service and the Institute of Meteorology and Water Management.¹⁷⁸⁷

Societal perceptions

Despite the positive assessment of the role of institutions in ensuring Poland's security, the prevailing conviction is that the country is not prepared adequately to act in emergency and unforeseen situations – whether caused by the forces of nature or negligence on the part of people, or planned and organised by forces hostile to Poland. Such situations include e.g. floods, which were experienced by Poles several times in recent years. This is probably the reason for the particularly severe criticism of the state's preparedness to encounter natural disasters (61 per cent of negative answers, and 23 per cent of the positive ones).¹⁷⁸⁸

1.2 Policy and Governance

1.2.1 Strategy scope and focus

The national firefighting and rescue efforts are the pivotal part of the crisis management system of the country. The Chief Commandant of the State Fire Service, under the supervision of the Minister of the Interior, is the central body of the state administration responsible for the organisation and management of those activities.

The system involves state firefighting and rescue units, volunteer firefighting units, industrial fire service units, industrial rescue service units, hospitals in major Polish cities, national experts specialising in different types of rescue operations.

Several services¹⁷⁸⁹ and structures also support or make part of the wider Polish CM system, including (but not limited to):

- the Police;
- the Border Guard;

¹⁷⁸⁶ Poland: National Progress Report on the Implementation of the Hyogo Framework for Action (2009-2011) – Interim, available at http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/hfa/15978_pol_NationalHFAprogress_2009-11.pdf.

¹⁷⁸⁷ Poland: National Progress Report on the Implementation of the Hyogo Framework for Action (2009-2011).

¹⁷⁸⁸ White Book on National Security of the Republic of Poland, <http://www.spbn.gov.pl/sbn/english-version/5043,English-version.html>.

¹⁷⁸⁹ A list of the so-called Ministry of Interior group is available at <https://msw.gov.pl/en/ministry/mi-group>, while the website of the Polish State Fire Service refers to organisations supporting the CM system <http://www.straz.gov.pl/page/en.php>.

- the State Inspection for Environment Protection;
- the Institute for Meteorology and Water Management;
- the National Atomic Energy Agency;
- the mining rescue stations;
- the maritime search and rescue service;
- the naval rescue service;
- NGOs, e.g. Mountain Volunteer Rescue Service; Tatra Mountains Volunteer Rescue Service; Water Volunteer Rescue Service; Mazurian Rescue Service and others.

Volunteer fire brigades within the rescue and firefighting system traditionally carry out fire fighting and prevention activities. Their functions, however, have evolved in recent years. The brigades have become more commonly involved in other types of rescue operations, including primarily technical or road incidents, where various rescue methods and measures are applied. Quite often volunteer firefighters are the first to appear at the site of an accident and take measures to save people's life, health, and property.

In April 2013, the Polish Council of Ministers adopted a Strategy of Development of the National Security System of the Republic of Poland 2022.¹⁷⁹⁰ In its part on challenges, development trends and development vision of the national security system of the Republic of Poland, the Strategy defines "the possibility of crisis situation, occurring as a consequence of natural disasters, human activity or of various global processes and phenomena" as challenge to national security. Thus the Strategy notes "it is crucial to maintain the highest level of response capability for such kind of occurrences, fast minimisation of their consequences, as well as their prevention, if only possible. It is particularly significant to provide appropriate resilience of critical infrastructure to crisis situations."

The Strategy contains specific texts regarding the capabilities of the Polish Armed Forces to carry out missions in crisis situations – section 2.1.3. on the provision of military support to government bodies during crisis situations of a non- military character envisage "preparation and readiness to use means and powers to clear areas off explosives and other dangerous materials, perform ice breaking and flood management actions and liquidate the consequences of natural disasters," while section 2.2.4. on the establishment of the National Reserve Forces calls for a reinforcement of the professional armed forces by the reserve forces in "a situation of intensified, military or non-military, threats, related to the necessities of crisis management, including natural disasters and liquidation of their effects, antiterrorist actions, protection of property, search and rescuing or protecting human life and health."

1.2.2 Monitoring and analytical support to policy making; R&D

Early warning

A Central Reporting Application (CAR) system is being developed in Poland – at the request of the Ministry of Administration and Digitalisation by the Podlasie Voivodeship Office in cooperation with the Government Security Centre (GCS) – to enable collection of comprehensive information on

¹⁷⁹⁰ Strategy of Development of the National Security System of the Republic of Poland 2022, Ministry of National Defence, http://mon.gov.pl/z/pliki/dokumenty/rozne/2014/01/ENGLISH_SRSBN_RP_do_pobrania.pdf.

threats from the local level up to the central level and to reduce the amount of data being duplicated by officers on duty in the crisis management centres.¹⁷⁹¹

In the event of a disaster, the GCS uses an interactive tool: the Geographic Information System, which allows access to the appropriate information, like the availability of rescue equipment and of rescuers, which results in a shortening of the dispatch time.¹⁷⁹²

Early warning is implemented pursuant to a regulation of the Council of Ministers of 2013 concerning contamination detection and notification systems and the competence of authorities. The regulation provides the legal base for unification and replacement of the previous warning signal system based on mechanical sirens with two signals: to announce and call-off an alarm with an option of broadcasting voice announcements. The second way of informing involves mass media. Work is in progress on enhanced threat notification systems and the use of hybrid TV as well as text messages.

A system of systems, the National Contamination Detection and Alerting System (KSWSiA)¹⁷⁹³ was established pursuant to the aforementioned regulation. The system is supervised and coordinated by the Minister of National Defence with the support of the Contamination Analysis Centre of the armed forces. KSWSiA has communication and information elements subordinated to five ministries (national defence, interior, environment, health and infrastructure), which include Contamination Detection System of the armed forces, the systems that monitor epidemics and communicable diseases; the system of early detection stations and of radiation monitoring points; detection, alert and early warning systems (supervised by voivodes); detection and alert system, organised as per the Plan for Combating Environmental Threats and Maritime Pollution (of the Maritime Search and Rescue Service).

Other systems

The responsibilities of relevant authorities related to monitoring and early warning are also supported by the following systems:

3. Monitoring and National Protection System (System Monitoringu i Ostrony Kraju (SMOK) of the Institute of Meteorology and Water Management – monitoring of hydrological and meteorological hazards;
4. System for Acquisition and Processing of Hydrogeological Data of the Polish Geological Institute (<http://www.psh.gov.pl/en/>); and
5. System Ostrony Przeciwośuwiskowej (SOPO) PIG-PIB – monitoring of landslides.

1.2.3 Policy for Prevention

Actions are carried out mostly to prevent from meteorological and flood hazards problems, for which information is supplied via the ISOK.

1.2.4 Policy for Preparedness

Poland's National progress report on the implementation of the Hyogo Framework for Action (2013-2015), hereinafter Hyogo 2013-2015, states that there has been substantial achievement as regards disaster preparedness plans. According to the report, Disaster Reduction operational plans exist at

¹⁷⁹¹ Paulina Pajkiert Vela, "Strengthening the Legal and Policy Framework for International Disaster Response in Poland."

¹⁷⁹² Paulina Pajkiert Vela, "Strengthening the Legal and Policy Framework for International Disaster Response in Poland."

¹⁷⁹³ Government Security Centre, <http://rcb.gov.pl/wp-content/uploads/2011/02/kswsia.pdf>.

each level of administration, but still their Preparedness part is the weakest of all.¹⁷⁹⁴ In addition to that, preparedness at the local community level needs to be improved.

Overall, Hyogo 2013-2015, reports a shift in Poland's attitude towards hazards to an integrated approach that includes research, legislation, control and measurement, economic, technical, educational, social and insurance problems aspects in parallel and ensures that they are equally treated.

1.2.5 Policy for Response

With respect to response, the authors of the Hyogo 2013-2015 note that the local institutions, village committees, communities, volunteers or urban resident welfare associations are properly trained for response. However, businesses are still not a proactive partner in the planning and delivery of response.¹⁷⁹⁵

1.2.6 Policy for Relief and Recovery

According to Hyogo 2013-2015, mechanisms and tools are being adopted for the implementation of environmental management and post-disaster recovery programmes and institutionalised at the various levels.¹⁷⁹⁶

1.3 Financing

1.3.1 Investing in preparedness

The Rescue and Civil Protection Program (PRiOL)¹⁷⁹⁷ for the period 2014-2020 details the complex structure of the total budget for rescue and civil protection activities, as follows:

- annual subsidy (section 42/754/75409 of the State Budget) for the State Fire Service HQ for the implementation of tasks of the NFRS – PLN 70.716 mln¹⁷⁹⁸ for 2013¹⁷⁹⁹
- support to volunteer fire brigade, at the discretion of the Minister of Interior – PLN 31.247 mln for 2013
- reserve of the state budget – for preventing and dealing with the consequences of natural disasters – PLN 1.411 bln. for 2013
- based on an agreement between the Minister of Environmental Affairs and the Minister of Interior and Administration, signed on 25 March 2011, for annual funding under a special reserve created, at the disposal of the Minister of Environment for the purchase of specialised

¹⁷⁹⁴ National progress report on the implementation of the Hyogo Framework for Action (2013-2015), http://www.preventionweb.net/files/41795_POL_NationalHFAprogress_2013-15.pdf.

¹⁷⁹⁵ Hyogo 2013-2015.

¹⁷⁹⁶ Hyogo 2013-2015.

¹⁷⁹⁷ Program Ratownictwa i Ochrony Ludności na lata 2014–2020 (PRiOL), in Polish, available at <http://czkw.kielce.uw.gov.pl/download/4/15665/ProgramuRatownictwaiOchronyLudnoscinalata2014-2020.pdf>.

¹⁷⁹⁸ Approximately EUR 16.33 mln according to current exchange rate (1 PLN = 0.23 Euro).

¹⁷⁹⁹ Current figures could be obtained by the State Budget for 2014 (Ustawa budżetowa na rok 2014 z dnia 24 stycznia 2014 r. - podpisana przez Prezydenta RP 29 stycznia 2014 r. (Dz. U. z 2014 r., poz. 162)), Website of the Ministry of Finance, in Polish, <http://www.mf.gov.pl/ministerstwo-finansow/dzialalnosc/finanse-publiczne/budzet-panstwa/ustawy-budzetowe/2014/ustawa>

rescue equipment for the relationship Volunteer Fire service and NGOs performing rescue tasks in mountains and in water – PLN 11.429 mln.

- for re-equipping of rescue services – PLN 11.429 mln. for 2013
- state expenditure on civil defence as per section 42/754/75414 (civil defence, carried by the Head of the National Civil Defence) and section 85/754/75414 (budgets of provincial governors for civil defence and 85/750/75011 (budgets of provincial governors for provincial offices of the public administration) – PLN 26.786 mln. for 2013
- funding by the European Regional Development Fund, European Social Fund, the Cohesion Fund, the Internal Security Fund, European Investment Bank, European Solidarity Fund.

The average annual increase cost improvement projects in the field of civil defence planned for the years 2013-2022 is:

- at the central level (ministries) – PLN 870 000
- at the central level (central government bodies) – PLN 24 000
- at the provincial level – PLN 16.453 mln

1.3.2 Investing in consequence management

International Aid

Created as a reaction to the heavy floods in Central Europe in the summer of 2002, European Union's Solidarity Fund (EUSF) is aimed at responding to major natural disasters and express Europe's solidarity to region suffering the consequences of disasters. Since then, it has been activated on 60 occasions, including floods, forest fires, earthquakes, storms and drought in 23 European countries. As of September 2014, the Fund has provided funding of over Euro 3.6 bln. Poland has received a total of EUR 105.6 mln. of aid for the floods in May 2010 – covering only a small percentage of the total estimated damage of almost EUR 3 bln.¹⁸⁰⁰

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

No specific information could be obtained.

1.4.2 Departmental Lessons Learned systems

No information could be obtained.

1.4.3 Centralised (national) Lessons Learned system

No information could be obtained.

¹⁸⁰⁰ European Commission, The Funds, http://ec.europa.eu/regional_policy/sources/thefunds/doc/interventions_since_2002.pdf.

1.4.4 International exchange for Lessons Learned

Under the auspices of the Ministry of the Interior and the Ministry of Foreign Affairs through the State Fire Service HQ and the Institute of Meteorology and Water Management extensive international cooperation is realised, incl. on lessons learned with

- United Nations Economic Commission for Europe
- Council for the Baltic Sea States
- Central European Initiative
- The Visegrad Group (V4)
- Office for the Coordination of Humanitarian Affairs (INSARAG International Search and Rescue Advisory Group).
- Central European Disaster Prevention Forum Platform (CEUDIP)
- European Forum for Disaster Risk Reduction
- European Network of National Platforms (ENNP).

1.4.5 Regular policy reviews

In Poland, a strategic review of the whole national security system was performed. One of the outcomes was a White Book providing, among other things, strategic guidance for the crisis management system.

The document proposes a comprehensive approach to be taken within the framework of the National Firefighting and Rescue System (NFRS), with strategic tasks being risk analysis and identification of threats, the elaboration of emergency plans (incl. rules on the use of force, inter-agency cooperation, means of communication, etc.), monitoring, informing, warning and alarming people and institutions, services and other entities performing tasks related to civil protection about threats, educational activities, organisation of rescue exercises, and international cooperation.

In terms of actions to be taken to achieve the operational strategy, the White Book advises the issues related to civil defence to be regulated in a comprehensive manner with a separate statutory act, to properly place the protection of population tasks within the state security system and divide the roles of involved public administration bodies, leading to harmonisation of applicable laws and to streamline responses. The above-described act and related laws should prepare the groundwork to improve public education and determine the rules for civilian involvement.¹⁸⁰¹

In operational terms, the regulations should streamline inter-agency cooperation, adjust control mechanisms, put in place adequate mechanisms for coordination of rescue operations and provide the basis for the functioning of rescue dispatch centres. The White Book makes a note that the Ministry of Interior has initiated such a systematisation of the existing rules regarding the protection of the population and civil defence by means of preparing a draft law on protection of the population. However, it further argues that the draft's scope could be extended to cover the rescue element to achieve greater coherence and functional integration within the crisis management system, as well as to take out non-defence issues contained in the current act on the general defence duty and transfer them to the proposed act.¹⁸⁰²

¹⁸⁰¹ Website of White Book on National Security of the Republic of Poland, www.spbn.gov.pl/sbn/english-version/5043,English-version.html.

¹⁸⁰² White Book on National Security of the Republic of Poland, <http://www.spbn.gov.pl/sbn/english-version/5043,English-version.html>.

The document deems it necessary that the National Firefighting and Rescue System be transformed into a National Rescue System, functioning according to unified rules, pertaining to: notification; “the alerting system; the organization and coordination of rescue operations; the procedures applicable to emergency rescue operations; the system of rescue training; communications systems for all rescue entities; the unification of equipment used by rescue entities; the documentation of events; the information exchange and database systems and the criteria of the efficiency of their operation.”¹⁸⁰³ The national rescue system should be centred around providing emergency response at district level and on coordination and support at provincial and national levels.

1.5 Resilience

The term “resilience” could be translated into Polish as “odporności”, or immunity. Along the many avenues of international cooperation, it could be observed that resilience is de facto tackled in Poland’s crisis management efforts.¹⁸⁰⁴

1.6 Information sharing and data protection

Information could not be obtained.

¹⁸⁰³ White Book on National Security of the Republic of Poland, <http://www.spbn.gov.pl/sbn/english-version/5043,English-version.html>.

¹⁸⁰⁴ For example, see the Hyogo 2013-2015.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In Poland there is no single document that conceptualises crisis management.

2.2 General crisis (emergency, disaster) management law

The general crisis management law in Poland is the Act on Crisis Management ¹⁸⁰⁵ of 26 April 2007. It gives definitions of basic terms, and specifies the authorities responsible for crisis management, their tasks and the general principles for crisis management.

Art. 2 of the Act defines crisis management as “activity of public administration authorities as an element of managing national security management system, which consists of preventing crisis situations, preparing to take control over them by way of planned activities, responding in case of emergencies, removal of their effects and the reconstruction of the resources and critical infrastructure.”

The Act also stipulates the procedures pertaining to civil planning, understood as “overall organisational projects aimed at preparing the public administration to manage crisis,” and critical infrastructure protection.

Article 8 of the Act provides the legal base for the establishment of a Government Crisis Management Team “under the Council of Ministers as a body issuing advice and opinions for the issues of initiating and coordinating activities related to crisis management” and further details its composition.

In addition to that, the Act stipulates the set-up of a Government Security Centre (GCS) with the aim to “increase the ability of competent services and public administration authorities to cope with difficult situations” and to “form a capable response system for crisis situations, when routine resources and operational procedures prove insufficient.” The Act also defines the mission and the tasks of the GCS.

As noted above, work on a draft Act on Protection of the Population has commenced.

2.3 Emergency rule

The legal base of the crisis management in Poland is formed by the Constitution of the Republic of Poland, ¹⁸⁰⁶ which was adopted on 2 April 1997.

Chapter XI stipulates the rules concerning extraordinary measures, namely martial law, a state of emergency or a state of natural disaster. Extraordinary measures may be introduced only by regulation, issued according to the statutes, and are required to be publicised. Separate acts determine the principles for activity of organs of public authority and the degree to which the freedoms and rights of persons and citizens may be subject to limitation.

¹⁸⁰⁵ Act on Crisis Management, Website of Government Security Centre, <http://rcb.gov.pl/eng/wp-content/uploads/2011/03/ACT-on-Crisis-Management-final-version-31-12-2010.pdf>.

¹⁸⁰⁶ The Constitution of the Republic of Poland, <http://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm>.

As far as functioning of the state is concerned, art. 228, p. 7 stipulates that during a period of introduction of extraordinary measures, the following shall not be subject to change: the Constitution, the Acts on Elections to the Sejm, the Senate and organs of local self-governments, the Act on Elections to the Presidency, as well as statutes on extraordinary measures. Moreover, during a period of introduction of extraordinary measures, as well as within the period of 90 days following its termination, the term of office of the Sejm may not be shortened, nor may a nationwide referendum, nor elections to the Sejm, Senate, organs of local self-government nor elections for the Presidency be held, and the term of office of such organs shall be appropriately prolonged. Elections to organs of local self-government shall be possible only in those places where the extraordinary measures have not been introduced.

A state of martial law is declared by the President in the case of external threats to the State, acts of armed aggression against the territory of the Republic of Poland or when an obligation of common defence against aggression arises by virtue of international agreement. According to art. 230, a state of emergency may be introduced in the case of threats to the constitutional order of the State, to security of the citizenry or public order. Art. 232 of the Polish Constitution stipulates that in order to prevent or remove the consequences of a natural catastrophe or a technological accident exhibiting characteristics of a natural disaster, the Council of Ministers may introduce, for a definite period no longer than 30 days, a state of natural disaster in a part of or upon the whole territory of the State.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Three acts, on a State of Martial Law and (...), on a State of Emergency, and on a State of Natural Disaster, provide definitions, codes of conduct for involved authorities and the scope of limitations of human rights and freedoms in each of the three extraordinary cases. However, the aim of the acts, all adopted in 2002, was mostly to clarify the responsibilities for action in case of an emergency, as the floods of 1997 exposed ambiguities in the interpretation of the regulations.

Two acts of 24 August 1991, on the State Fire Service and on Fire Prevention, form the legal basis for the organisation and functioning of the State Fire Service.

The Polish legal framework also includes an Act of 21 November 1967 on universal obligation to defend the Republic of Poland, which regulates the so-called “civil defence” system. Pursuant to the abovementioned Act, the main government administration authority in the field of civil defence is the Chief of the National Civil Defence, who is appointed by the Prime Minister on the request of the minister competent for internal affairs. The Chief of the National Civil Defence shall report to the minister competent for internal affairs. At present, the Chief Commandant of the State Fire Service, is also the Chief of the National Civil Defence.¹⁸⁰⁷

Executive civil defence authorities are the starostes, commune heads, mayors and city presidents. Civil defence chiefs in relevant provinces, counties and communes shall manage and coordinate preparation and realisation of projects in the area of civil defence by state institutions, entrepreneurs and other organisational units and social organisations acting on their territory.

However, Art. 140 of the Act on universal obligation to defend the Republic of Poland, “a statutory basis for issuing regulations by the Government in respect of specification of duties and rights of

¹⁸⁰⁷ Website of the National Civil Defence, http://www.ock.gov.pl/english/civil_defence_structure.

institutions in the field of civil defence, matters of civil defence formations and signals of common warning and alarming” was cancelled with the abolishment of the civil defence system, creating a legal vacuum in some areas of civil defence, which is expected to be filled with the act on protection of population.

The tasks of the organs of government and self-government administration, implemented within crisis management, were included in following legal acts:

- Act dated 23 January 2009 on Provincial and Government Administration in a Province;
- Act dated 5 June 1998 on Provincial Self-Government;
- Act dated 5 June 1998 on County Self-Government;
- Act dated 8 March 1990 on Commune Self-Government;
- Ordinance of the Council of Ministers of 20 February 2003 on the detailed principles of participation of sub-branches and branches of Polish Armed Forces in preventing or eliminating effects of natural disaster;
- Ordinance of the Minister of Economy of 8 November 2002 on the requirements of action plan in the event of human life, health, property or environmental threat;
- Ordinance of the Council of Ministers of 30 April 2010 on the plans of critical infrastructure protection;
- Regulation no. 86 of the Prime Minister of 14 August 2008 on organisation and code of conduct of the Government Team for Crisis Management;
- Ordinance of the Council of Ministers of 30 April 2010 on the Report on threats to national security;
- Ordinance of the Council of Ministers of 15 December 2009 determining which government authorities shall establish emergency management centres and defining their methods of operation;
- Ordinance of the Prime Minister of 10 July 2008 on organisation and activity of Government Security Centre.¹⁸⁰⁸
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2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The tasks of the organs of regional and local authorities could be found in a number of legal acts, more specifically:

- Act dated 23 January 2009 on Provincial and Government Administration in a Province;
- Act dated 5 June 1998 on Provincial Self-Government;
- Act dated 5 June 1998 on County Self-Government;
- Act dated 8 March 1990 on Commune Self-Government.

¹⁸⁰⁸

A comprehensive list of relevant legislation could be found in the White Book.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The involvement of NGOs and volunteers in rescue services and civil protection is regulated by numerous pieces of legislation – both laws and administrative acts, including:

- Act dated 24 April 2003 on Public Benefit and Volunteer Work;
- Act dated 7 April 1989 on Associations;
- Act dated 6 April 1984 on Foundations;
- Act dated 16 November 1964 on the Polish Red Cross;
- Act dated 27 October 2010 on the Public Utility Activity and Volunteer Activity;
- Act dated 18 August 2011 on the Safety And Rescue in the Mountains and Organised Ski Areas;
- Act dated 18 August 2011 on the Safety of Persons in Water;
- Regulation of the Minister of the Interior and Administration of 14 September 1998 on the scope, detailed conditions and mode of including fire protection units in the NFRS;
- Regulation of the Minister of the Interior and Administration of 18 February 2011, concerning the detailed principles of organisation of the NFRS.

2.7 Legal regulations for international engagements of first responders and crisis managers

In Poland regulations concerning crisis management are adapted to European Union requirements. EU Legal acts influencing Polish legislation in this field are:

- Treaty establishing a Constitution for Europe;
- COM (2010) 673: Objective 5: Increase Europe's resilience to crises and disasters - Action 2: An all hazards approach to threat and risk assessment;
- Council Directive 82/501/EEC of 24 June 1982 on the major-accident hazards of certain industrial activities (Seveso);
- Council Directive 96/82/EC of 9 December 1996 on the control of major accident hazards (Seveso II);
- Council Decision 91/396/EEC of 29 July 1991 on the introduction of a single European emergency call number;
- Directive 2007/60/WE of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risk;
- Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection;
- Council Decision 2008/617/JHA of 23 June 2008 on the improvement of cooperation between the special intervention units of the Member States of the European Union in crisis situations;
- Council Framework Decision 2002/475/JHA of 13 June 2002 on combating terrorism;
- Council of Europe Convention on the prevention of terrorism, adopted on 16 May 2005 in Warsaw;

- Convention on the physical protection of nuclear material, including annex I and II, opened for signature in Vienna and New York on 3 March 1980;
- International Convention for suppression of acts of nuclear terrorism, adopted by the General Assembly of the United Nations on 13 April 2005.

It is also a signatory of the Convention on the Transboundary Effects of Industrial Accidents.

Poland has signed 11 bilateral agreements with European countries: Belarus, Croatia, Czech Republic, France, Germany, Hungary, Lithuania, Russian Federation, Slovakia, Slovenia and Ukraine, as well as with the Ministry of Interior of Brandenburg, the Ministry of the Interior of Free State of Saxony, and the Ministry of the Interior of Mecklenburg-Western Pomerania. An agreement with Estonia is currently being negotiated.

List of the agreements is available below:

- Agreement between the Republic of Poland and the Federal Republic of Germany on Mutual Assistance during Technological and Natural Disasters and Other Serious Accidents, signed in Warsaw on 10 April 1997;
- Agreement between the Ministry of the Interior and Administration of the Republic of Poland and the Ministry of Interior of Brandenburg on Cooperation and Mutual Assistance During Technological and Natural Disasters and Other Serious Accidents, signed in Slubice on 18 July 2002;
- Agreement between Ministry of the Interior and Administration of the Republic of Poland and the Ministry of the Interior of Mecklenburg-Western Pomerania on Cooperation and Mutual Assistance During Technological and Natural Disasters and Other Serious Accidents, signed in Slubice on 18 July 2002;
- Agreement between the Ministry of the Interior and Administration of the Republic of Poland and the Ministry of the Interior of Free State of Saxony on Cooperation and Mutual Assistance During Technological and Natural Disasters and Other Serious Accidents, signed in Slubice on 18 July 2002;
- Agreement between the Government of the Republic of Poland and the Government of the Russian Federation on Cooperation in Prevention of Technological and Natural Disasters, and in Relief of Their Consequences, signed in Warsaw on 25 August 1993;
- Agreement between the Government of the Republic of Poland and the Government of the Lithuanian Republic on Cooperation and Mutual Assistance in Case of Technological and Natural Disasters and Other Serious Accidents, signed in Warsaw on 4 April 2000;
- Agreement between the Government of the Republic of Poland and the Government of the Slovak Republic on Cooperation and Mutual Assistance during Technological and Natural Disasters and Other Serious Accidents, signed in Bratislava on 24 January 2000;
- Agreement between the Republic of Poland and the Republic of Hungary on Cooperation and Mutual Assistance in Prevention of Technological and Natural Disasters and Other Serious Accidents, and in Relief of Their Consequences, signed in Warsaw on 6 April 2000;
- Agreement between the Republic of Poland and the Czech Republic on Cooperation and Mutual Assistance in Case of Technological and Natural Disasters and Other Emergencies, signed in Warsaw on 8 June 2000;
- Agreement between the Government of the Republic of Poland and the Cabinet of Ministers of Ukraine on Cooperation and Mutual Assistance in Prevention of Technological and Natural

Disasters and Other Emergencies, and in Relief of Their Consequences, signed in Warsaw on 19 July 2002;

- Agreement between the Government of the Republic of Poland and the Republic of France on Cooperation in the Field of Internal Affairs, signed in Warsaw on 12 September 1996;
- Agreement between the Government of the Republic of Poland and the Republic of Croatia on Cooperation in Protection against Technological and Natural Disasters, and in Relief of Their Consequences, signed in Zagreb on 17 September 2003;
- Agreement between the Government of the Republic of Poland and the Government of the Republic of Belarus on Cooperation in the Field of the Prevention of Technological and Natural Disasters and Other Emergencies, and in Relief of Their Consequences;
- Agreement between the Government of the Republic of Poland and the Government of the Republic of Slovenia on Cooperation in the Prevention of Natural Disasters and Other Accidents, and in Relief of their Consequences;
- Agreement between the Government of the Republic of Poland and the Government of the Republic of Estonia on Cooperation in the Field of Civil Protection (first round of negotiations).

3 Organisation

3.1 Organisational chart

In Poland, there is no single authority dealing with disaster management. The structure of the Polish emergency management has five levels: state, ministry (central government body), province (voivodeship), county (powiat) and district (commune, gmina).¹⁸⁰⁹

Coordination (see Table 5) at the five levels is carried by the Government Crisis Management Team, the Ministry/ Body CM Team, Provincial CM Team, the County CM Team and District CM Team, with the management responsibilities assigned to the Prime Minister and the Cabinet, the respective Minister/Head, the provincial governors, the county administrators, and the mayors, respectively.

Table 6: Crisis Management Levels in Poland

Level	Management	Coordination
State	Prime Minister, Cabinet of Ministers	Government CM Team; Government Security Centre
Ministry/Government Body	Minister/ Head	CM Team
Province / Voivodeship	Provincial Governor	Provincial CM Team; Provincial CM Centre
County / Powiat level	County Administrator (starost)	County CM Team, County CM Centre
District / Commune level	District/Borough Administrator or Mayor	District CM Team, District CM Centre (if needed)

National Crisis Management Plan

Part II of the NCMP defines the tasks related to monitoring of risks carried by the ministers, heads of central government bodies and provincial governors, the operational mode for the allocation of the forces and resources for crisis management purposes, the mechanism for national authorities to request and receive international assistance (including by more than one organisation; and the Polish institutions, acting as POC for the relevant international structures), and the operational mode for the Polish Armed Forces providing assistance in case of emergency.

Importantly, in accordance with art. 21 of the Act on Crisis Management, the NCMP defines a general procedure for reaction in case of a crisis, distinguishes between four levels of danger, and details specific procedures for interaction among national authorities for levels 2, 3 and 4:

¹⁸⁰⁹ Website of the Government Security Centre, http://rcb.gov.pl/?page_id=489, and Piotr Matczak and Grzegorz Abgarowicz, "Country study: Poland," Analysis of Civil Security Systems in Europe.

Table 7: Levels of Crisis Management with Responsible Actors

Level	Definition	Responsible
1	Crisis at the provincial level	Voivoda
2	Crisis at a ministry level	Minister
3	Crisis at a multi-ministry level	Council of Ministers
4	Crisis calling for extraordinary measures	As per relevant law(s)

Part II of the Plan further describes the crisis management centres architecture in Poland:

21. CM centres of Ministry of Interior services (Fire service, Police, Border Guard, Government Protection Bureau);
22. CM centres of the MI, the Ministry of National Defence, and the Ministry of Foreign Affairs
23. CM centres of special services;
24. CM centres of other ministries;
25. CM centres at provincial level.

Government Crisis Management Team

The Act on Crisis Management stipulates the set-up of a Government Crisis Management Team under the Council of Ministers as an advisory body regarding issues of initiating and coordinating crisis management activities. The Team shall be composed of the Prime Minister (acting as the Team's the chairperson), the Minister of Defence and the Minister of Interior (deputy chairpersons), and the Minister Coordinating Special Services (if appointed). Government administration authorities participate, if necessary, in the Team's meetings, as members. These could be ministers, the Chief Geodetic Inspector of Poland, the Chief Inspector of Environmental Protection, the Chief Sanitary Inspector, the Chief Veterinary Officer, the Chief Commandant of the State Fire Service, the Commander in Chief of Police, the Chief Commander of Border Guard, the Head of the National Water Management Board, the Head of the National Atomic Energy Agency, the Head of the Civil Aviation Office, the Head of the Internal Security Agency, Head of the Intelligence Agency, the Head of the National Civil Defence, the Head of the Military Counter-Intelligence Service, the Head of the Military Intelligence Service.

State Fire Service

The State Fire Service (Państwowa Straż Pożarna, PSP) is a professional service, originally established to fight fires. However, the Service's role has been extended to cover the coordination and implementation of rescue operations in crisis situations, caused by disasters and or by transport, construction, or chemical accidents. Outside its response core, the tasks of the fire service also include prevention, identification of hazards, and education, research and development. Moreover, the Service cooperates with the head of the National Criminal Information Centre.

The service functions under the supervision of the Ministry of Interior, and is the main part of the National Firefighting and Rescue System (NFRS), with the Chief Commandant of the State Fire Service being the head of the NFRS (acting as the Chief of the National Civil Defence and as the Director General for Civil Protection). The Rescue and Civil Protection Department of the Ministry of Interior is the entity that is tasked to collect and analyse information about the NFRS.

The organisational structure of the State Fire Service consists of the National Headquarters of the SFS, 16 Regional (voivodeship) Headquarters of the SFS, 353 Municipal (county-level) Headquarters of the SFS and 499 Fire and Rescue Units. The five specialised schools educating country's firefighters are also subordinated to the PSP headquarters. These include the Main School of Fire Service in Warsaw, Central School of the State Fire Service in Czeszochowa, two Fire Service Colleges, located in Krakow and Poznan, and NCO School of the State Fire Service in Bydgoszcz.

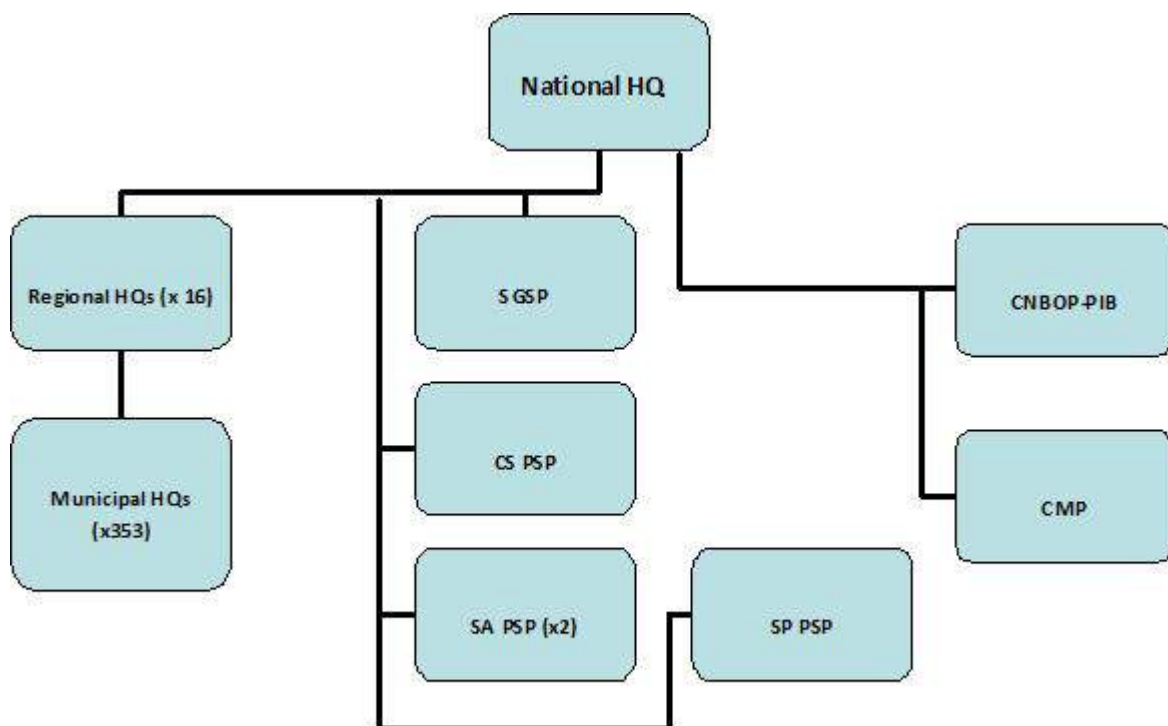


Figure 6: Structure of the PSP.¹⁸¹⁰

The Scientific and Research Centre for Fire Protection (CNBOP-PIB), responsible for testing, certification and validation of the equipment used in the State Fire Service, technical fire protection systems, as well as the expertise concerning fire protection systems, including design and installation, and the Central Museum of Fire Service (CMP) are also part of the PSP structure.

The National Centre for Rescue Coordination and Civil Protection, part of the PSP structure, serves as Poland's contact point for the EU Emergency Response Coordination Centre (previous Monitoring and Information Centre (MIC)¹⁸¹¹, the NATO Euro-Atlantic Disaster Response Coordination Centre (EADRCC) and the UN Office for Coordination of Humanitarian Affairs (OCHA) civil protection and humanitarian aid operations, the UN Economic Commission for Europe (UNECE) Convention on the Transboundary Effects of Industrial Accidents. The service cooperates in various formats – the Organisation for Economic Co-operation and Development (OECD), the Council of the Baltic Sea State, Salzburg Forum, Visegrad Four, International Association of Fire and Rescue Service (CTIF), Federation of the European Union Fire Officer Associations (FEU), European Fire Academy (EFA), etc., as well as bilaterally.

¹⁸¹⁰ Source: <http://www.straz.gov.pl/english/management>.

¹⁸¹¹ The ERCC, operating within the European Commission's Humanitarian Aid and Civil Protection department replaces and upgrades the functions of the previous Monitoring and Information Centre.

Nearly 30 thousand officers serve in the PSP. In recent years, the Service underwent technical modernisation. Its vehicles and rescue and firefighting equipment have been systematically replaced with new ones.

Poland's fire service cooperates closely with the Volunteer Fire Service (OSP), which comprises nearly 17 thousand units with approximately 500 thousand active volunteer firefighters (of which 3 815 units with 126 thousand firefighters make part of the NFRS).

Overall, the NFRS includes:

- 499 state firefighting and rescue units;
- 3 815 volunteer firefighting units;
- 5 industrial fire service units;
- 2 industrial rescue service;
- 11 hospitals in major Polish cities;
- 201 national experts specializing in different rescue types.

Government Security Centre

The Director of the Government Security Centre ¹⁸¹² (GCS) acts as a secretary of the Team. GCS is a supraministerial structure, a key component of the Polish crisis management system, established with the aim to augment the capabilities of the competent services and public administration authorities to cope with difficult situations, and to help organise the functioning of the services responsible for crisis management.

The GCS was established under the Act on Crisis Management and has been operating since 2 August 2008. Currently, the organisational structure and operating mode of the Centre is regulated by a Regulation of the Prime Minister of 11 April 2011. The structure of the GCS is graphically represented in Figure 4 below.

Conducting a comprehensive risk assessment, based on data obtained from within the structures of public administration and from international partners, is considered to be the main task of the GCS.

Other tasks of the GCS include:

- compiling a threat catalogue;
- monitoring of threats and hazards in the country and abroad;
- initiating emergency management procedures on the national level;
- implementing planning and policy objectives concerning crisis management;
- supervising consistency of response procedures;
- organising training and exercises in emergency management;
- implementing objectives concerning prevention, control and mitigation of situations resulting from incidents of terrorist nature;
- international cooperation in emergency management, especially with NATO and EU structures.

¹⁸¹² Website of the Government Security Centre, http://rcb.gov.pl/eng/?page_id=212.

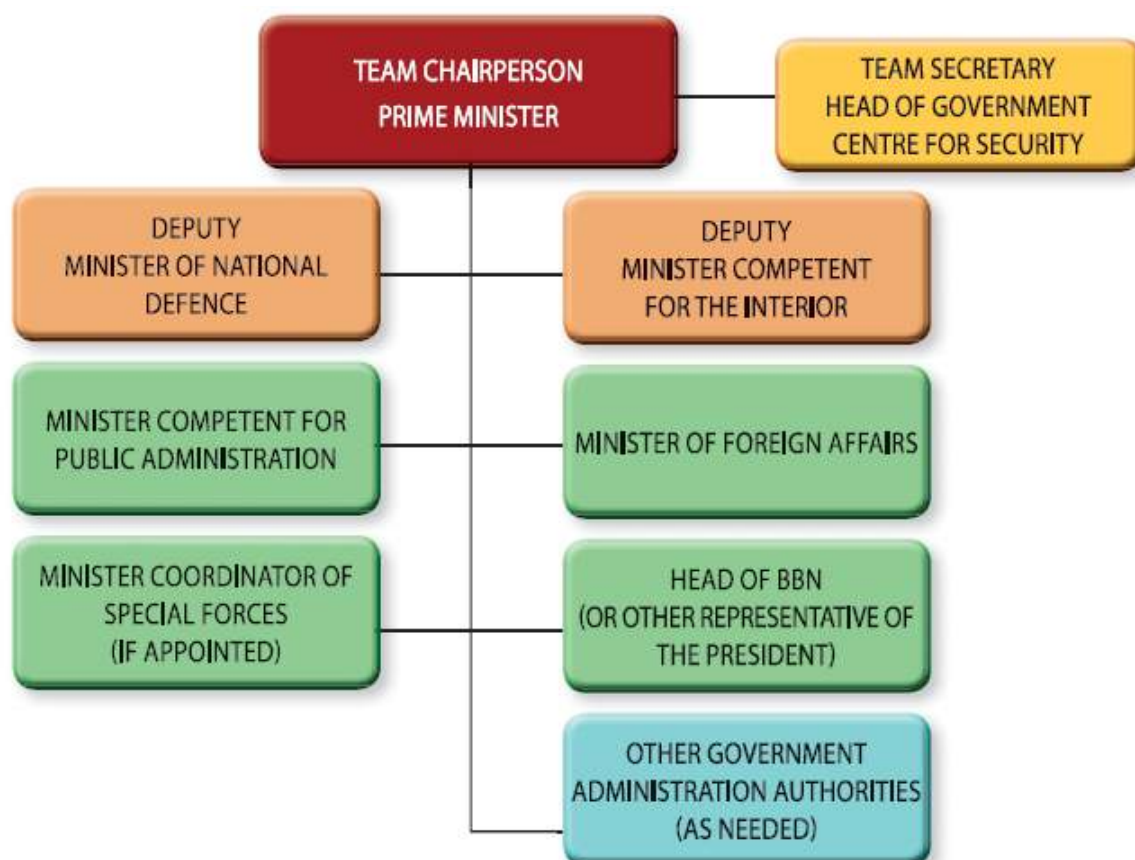


Figure 7: Organisation of the Government Crisis Management Centre.

National Platform for Disaster Risk Reduction

In 2009, Poland formally established its National Platform for Disaster Risk Reduction (NPDRR) from what was formerly the International Decade for Natural Disaster Reduction Committee that had been established in 1991 by the Institute of Meteorology and Water Management. Diverse actors are represented within Poland's NPDRR, including government agencies, scientific institutes and the Polish Red Cross.

3.2 Organisational cooperation

International cooperation

The PSP of Poland participates in the international operations on the basis of bilateral agreements with certain European countries, as well as in missions coordinated by the UN OCHA, the EU ERCC (previous MIC), the NATO EADRCC.

Polish involvement in international rescue operations includes:¹⁸¹³

- Earthquakes: Armenia (1988), Turkey (1999), Algeria (2003), Iran (2003), Pakistan (2005), Indonesia (2006), Haiti (2010), Japan – deployment of Polish expert (EUCPT) (2011)

¹⁸¹³ Website of the State Fire Service.

- Floods: Hungary (2000), the Czech Republic (2002), Germany (2002), Ukraine (2008), Montenegro (2010), Pakistan – deployment of Polish expert (EUCPT)(2011)
- Forest fires: Russia (2010)
- Ammunition depot explosion: the Republic of Congo – deployment of Polish expert (UNDAC Team) (2012)

Involvement in the humanitarian assistance actions includes:

- Medical support: Albania (1999), Romania (2000), India (2001)
- Equipment: Former Yugoslav Republic of Macedonia (2007), Romania (2008), Bulgaria (2012)
- Other assistance: Ukraine (2001), Iran (2004), Sri Lanka and Indonesia (2004/2005), Romania (2005), Pakistan (2005)
- Transport: Bulgaria (2006), Georgia (2008), Albania (2010)

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Procedures and Guidelines

Art. 5 of the Act on Crisis Management introduces crisis management plans on all levels of public administration (national, voivodeship, poviats and gmina) and stipulates that the plans shall comprise all phases of crisis management (prevention, preparedness, response and recovery).

The crisis management plans shall contain the following three elements: a core plan (including identification of threats and risk assessment, risk maps and maps of threats, tasks and responsibilities of actors involved in the form of a matrix, capabilities and resources), the set of tasks in the case of crisis situations, and the functional annexes to the main plan specifying procedures for implementation of the tasks of crisis management.

Part III of the NCMP¹⁸¹⁴ details 11 SOPs (including aim, responsible authority, applicable law, course of action) for the implementation of tasks in the field of crisis management, namely:

6. Convocation of government meetings
7. Activation of additional funds
8. Organisation of crisis communication
9. Suspension of the provisions of the Schengen agreement
10. Commissioning activities and procedures of the crisis management system
11. Introduction of a state of natural disaster
12. Introduction of a state of emergency
13. Introduction of a state of martial law
14. Tool system in case of abduction by terrorists of Polish citizens outside Poland
15. Action in the event mass influx of foreigners in the territory of Poland
16. Cooperation between public administration and owners / operators of critical infrastructure

Part III of the NCMP deals also with:

- the organisation of a system for monitoring risks, warning and alerting;
- the principles of informing the population;
- the organization of the evacuation of areas at risk (from abroad, and within Polish borders);
- the organization of rescue, medical care, social assistance and psychological aid;
- the organisation of medical emergency actions (incl. Air rescue);
- the rules and procedures for assessing and documenting damage caused by natural disasters.

In addition to the NCMP, art. 5b introduces a National Critical Infrastructure Protection Programme with the aim to distinguish the facilities, equipment, installations and services that are essential for the security of the state and its citizens and to ensure efficient functioning of public administration authorities, institutions and enterprises. At the same time, the programme is to enable support of the entities.

¹⁸¹⁴ Available only in Polish language.

4.2 Operations planning

Information could not be obtain for this specific section.

4.3 Logistics support in crises

Information could not be obtain for this specific section.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Crisis communication to the public

In the preparedness phase, province, county and municipal websites provide relevant information. The State Fire Service also provides information about risks on its website and, occasionally, uses social media channels. In addition to that, in some cities SMS warning systems have been introduced. Alert systems are built at province level and are based on sirens. A ministerial decree on the detection of contamination and of the authorities in these matters of 2006 orders use of alarms in case of an air attack and contamination. The organisation of the alert systems is within the responsibility of provincial governors.

In an emergency situation various methods of informing the public are used, like posters, leaflets etc. Media have legal obligations to inform in case of emergency.

There have been several examples of information campaigns initiated by various government agencies: on the 112 emergency number; on removing snow from roofs; on safety during winter holidays; on safety during winter recreation and sports etc. There have been several campaigns related to floods, e.g. the National Water Management Authority launched the “To know more about Water” campaign, while the Institute of Meteorology and Water Management has formed a special task force dealing with information and education on flood preparedness.

5 Capabilities

5.1 Human resources

In April 2014 the Polish Government adopted a comprehensive Rescue and Civil Protection Program (PRiOL)¹⁸¹⁵ for the period 2014-2020, which provides an overview of the current status of the rescue and civil protection system in Poland, stipulates the strategic goals and the ways and means for their implementation and details financial parameters related to the programme's realisation.

The programme is a joint effort of the Ministers of Interior, Administration and Digitisation, Health and National Defence and interferes with issues concerning the National Firefighting and Rescue System (NFRS), the National Medical Rescue System and the Alert and Rescue System.

PRiOL specifically mentions volunteer and rescue organisations, supporting the NFRS in Poland, such as:

- the Volunteer Fire Brigade – listed as a unit subordinated to the State Fire Service (as per two regulations of the interior minister listed below in text);
- the mining rescue stations; and
- the Mountain Volunteer Search and Rescue (GOPR) and the Tatra Volunteer Search and Rescue (TOPR) – authorised to take part in mountain rescue operations as per relevant act of 18 August 2011 on the safety and rescue in mountain areas and designated ski zones.

PRiOL notes that organisations such as the GOPR, TOPR, the Water Volunteer Search and Rescue (WOPR), Mazurian Volunteer Search and Rescue (MOPR), Mazurian Rescue Service and the Polish Red Cross should have opportunities to integrate more closely and cooperate more effectively with state rescue services, including the PSP.

Specifically, the Polish Red Cross rescue capabilities include following groups: 20 Rescue Groups – trained and equipped for participation in a major disaster; 1 Medical Rescue Group – arranging a Field Medical Point where qualified medical assistance is provided to victims; 1 Special Rescue Group – providing support to Rescue Patrols in their search efforts with 470 members and 6 Humanitarian Assistance Groups consisting of 83 members.

5.2 Materiel (non-financial) resources

According to PRiOL, Poland has committed to the EU civil protection mechanism, to support rescue and humanitarian missions, 340 fire men, 6-12 dogs and 85 vehicles, namely:

- module for middle to heavy urban search and rescue operations (MUSAR and HUSAR);
- 2 modules for High Capacity Pumping (HCP);
- 3 modules for Ground Forest Fire Fighting using Vehicles (GFFV);
- module for CBRN detection.

¹⁸¹⁵ Program Ratownictwa i Ochrony Ludności na lata 2014–2020 (PRiOL), in Polish, available at <http://czkw.kielce.uw.gov.pl/download/4/15665/ProgramuRatownictwaiOchronyLudnoscinalata2014-2020.pdf>.

5.3 Training

Professional training

The Main School of Fire Service is an academic facility subordinated to the Minister of Internal Affairs and an operational unit of the State Fire Service (PSP). It educates the firefighters of the PSP, officers of other services and guards of the MI system. The school also trains civilians. According to the Act on the State Fire Service, the School provides cadet officers with the opportunity to serve as trainees in the School Rescue and Firefighting Unit.¹⁸¹⁶

Trainings for citizens

The State Fire Service coordinates the educational programme Safe Life (together with the Swedish League for Civil Defence), targeting primary schools. As of November 2013, more than 3500 teachers and 111 700 kids received training covering several thematic areas – safe house, safe school, first aid, and took part in demonstration exercises.¹⁸¹⁷

5.4 Procurement

5.4.1 Procurement regulation

The public procurement system of Poland is based on the Act on Public Procurement (PPL)¹⁸¹⁸ of 29 January 2004, with further amendments.

In principle, contract award procedures are transparent, with few exceptions as per art. 4, pp. 1-14, including when “contracts are classified as “confidential” or “strictly confidential” under provisions of the act on protection of classified information, or if this is required in view of significant national security interest or protection of public security.”

The PPL is applied to the contracts above EUR 30 000 (art. 4, p.8 of the PPL).

The PPL distinguishes between the following procedures for awarding public contracts:

- Open tendering
- Restricted tendering
- Negotiated procedure with publication
- Negotiated procedure without publication
- Single-source procurement
- Request-for-quotations
- Electronic bidding

Procedures start with the publication of a contract notice that (depending on the value of the contract) is placed in the Public Procurement Bulletin and/or dispatched to the Publications Office of the European Union for the publication in the Official Journal of the European Union.

The dispatch of a notice to the latter is obligatory if the contract or design contest value exceeds the amounts indicated in the Regulation of the Prime Minister of 23 December 2013¹⁸¹⁹ on the threshold

¹⁸¹⁶ Website of the Main School of Fire Service.

¹⁸¹⁷ Website of the National Civil Defence, in Polish, <http://www.ock.gov.pl/>.

¹⁸¹⁸ Website of the Public Procurement Office, Act on Public Procurement, unofficial translation into English, 92 pp., ftp://ftp.uzp.gov.pl/publikacje/2008_public_procurement_law.pdf.

value of contracts and design contests which imposes an obligation of dispatching the notices to the EU Publications Office.¹⁸²⁰

As the regulation mentioned above, contract notices are submitted to the EU Publications Office, if the value of contracts awarded by public finance sector awarding entities is equal to or exceeds PLN equivalent of EUR 134 000 – for supplies or services and EUR 5 186 000 – for works.

Related thresholds are:

- for contracts awarded by other awarding entities: 207 000 Euro – for supplies or services; and 5 186 000 Euro – for works;
- in case of utilities contracts 414 000 Euro – for supplies or services; and 5 186 000 Euro – for works;
- in case of defence and security contracts 414 000 Euro – for supplies or services; and 5 186 000 Euro – for works;

As the PPL apply to contracts and contests above the EUR 30 000 the notices in the Public Procurement Bulletin include contracts equal or above 30 000 and below the European threshold.

As regards crisis management, public procurement notices are also published at the website of the State Fire Service and relevant authorities; the Centralised System for Access to Public Information (<http://ssdip.bip.gov.pl/search/publiccontracts/>).

Chapter 4a of the PPL stipulates separate provisions for contracts in the field of defence and security, which involve “1) deliveries of military equipment, including all the parts, components and subassemblies; 2) deliveries of sensitive equipment, including all parts, components and subassemblies; 3) works, supplies and services directly connected with the equipment mentioned in point 1 and 2, and all its components and subassemblies connected with life-cycle of this product; 4) works and services for special military purposes or sensitive works and services.”¹⁸²¹

5.4.2 Procurement procedures

A total of 302 contract notices has been published by the State Fire Service (HQ and Regional HQs) in the period 2009-2014, covering a wide range of items – from vocational trainings and software to vehicles and specialised equipment.

5.5 Niche capabilities

Information could not be obtained for this specific section.

¹⁸¹⁹ Website of the Public Procurement Office, <http://www.uzp.gov.pl/cmsws/page/?F;370>.

¹⁸²⁰ “Public Procurement System in Poland,” Website of the Public Procurement Office, www.uzp.gov.pl/cmsws/page/?F;356.

¹⁸²¹ Website of the Public Procurement Office, Act on Public Procurement, unofficial translation into English, <http://www.uzp.gov.pl/cmsws/page/?F;370>.

Resources

Legislative acts

Act dated 11 August 2001 on the Specific Rules for the Reconstruction, Renovation and Demolition of Buildings Destroyed or Damaged by Natural Disasters (Dz.U. [the Journal of Laws] No. 84, item 906, as amended)

Act dated 16 November 1964 on the Polish Red Cross

Act dated 16 September 2011 on Specific Solutions Related to the Elimination of the Consequences of Flooding (Dz.U. No. 234, item 1385, as amended)

Act dated 18 April 2002 on the State of Natural Disaster (Dz.U. No. 62, item 558, as amended)

Act dated 18 August 2011 on the Safety and Rescue in the Mountains and Organised Ski Areas

Act dated 18 August 2011 on the Safety of Persons in Water

Act dated 18 July 2001, – the Water Management Act (Dz.U. for year 2012, item 145, as amended)

Act dated 21 June 2002 on the State of Emergency (Dz.U. No. 113, item 985, as amended)

Act dated 23 January 2009 on Provincial and Government Administration in a Province

Act dated 24 August 1991 on Fire Prevention (Dz.U. No. 81, item 351, as amended)

Act dated 24 August 1991 on the State Fire Service (Dz.U. for year 2009, No. 12, item 68, as amended)

Act dated 26 April 2007 on Crisis Management (Dz.U. No. 89, item 590, as amended)

Act dated 27 October 2010 on the Public Utility Activity and Volunteer Activity

Act dated 29 August 2002 on Martial Law and the Competences of the Commander-in-Chief of the Armed Forces and the Rules of his Subordination to the Constitutional Authorities of the Republic of Poland (Dz.U. No. 156, item 1301, as amended)

Act dated 5 June 1998 on County Self-Government

Act dated 5 June 1998 on Provincial Self-Government

Act dated 6 April 1984 on Foundations

Act dated 7 April 1989 on Associations

Act dated 8 July 2010 on Specific Rules for the Preparation for Implementing Investments in the Field of Flood Control Structures (Dz.U. No. 143, item 963, as amended)

Act dated 8 March 1990 on Commune Self-Government

Act dated 8 September 2006 on the State Medical Rescue Service (Dz.U. No. 191, item 1410)

Act on Public Procurement (PPL)¹⁸²² of 29 January 2004

Constitution of the Republic of Poland

Ordinance of the Council of Ministers of 15 December 2009 determining which government authorities shall establish emergency management centres and defining their methods of operation

¹⁸²² Website of the Public Procurement Office, Act on Public Procurement, unofficial translation into English, <http://www.uzp.gov.pl/cmsws/page/?F;370>.

Ordinance of the Council of Ministers of 20 February 2003 on the detailed principles of participation of sub-branches and branches of Polish Armed Forces in preventing or eliminating effects of natural disaster

Ordinance of the Council of Ministers of 30 April 2010 on the plans of critical infrastructure protection

Ordinance of the Council of Ministers of 30 April 2010 on the Report on threats to national security

Ordinance of the Minister of Economy of 8 November 2002 on the requirements of action plan in the event of human life, health, property or environmental threat

Ordinance of the Prime Minister of 10 July 2008 on organisation and activity of Government Security Centre.

Regulation no. 86 of the Prime Minister of 14 August 2008 on organisation and code of conduct of the Government Team for Crisis Management

Regulation of the Minister of the Interior and Administration of 14 September 1998 on the scope, detailed conditions and mode of including fire protection units in the NFRS

Regulation of the Minister of the Interior and Administration of 18 February 2011, concerning the detailed principles of organisation of the NFRS

Official documents (white papers, strategies, etc.)

Krajowy Plan Zarządzania Kryzysowego (National Crisis Management Plan)

National Progress Report on the Implementation of the Hyogo Framework For Action (2013-2015)

Raport o Zagrożeniach Bezpieczeństwa Narodowego (Report on Threats to National Security)

Rescue and Civil Protection Program (PRiOL)

Strategy of Development of the National Security System of the Republic of Poland 2022

White Book on National Security of the Republic of Poland

Online resources

Central Mine Rescue Station, www.csrg.bytom.pl

EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net

Government Security Centre, <http://rcb.gov.pl/>

Institute for Meteorology and Water Management, www.imgw.pl

Maritime Search and Rescue Service, <http://www.sar.gov.pl>

Mazurian Rescue Service, www.msr.unicity.pl

Ministry of the Interior, www.msw.gov.pl

Mountain Volunteer Rescue Service, www.zakopane.pl/topr

National Atomic Energy Agency, <http://www.paa.gov.pl>

National Border Guard Headquarters, www.strazgraniczna.pl

National Police Headquarters, www.kgp.gov.pl

Naval Rescue Service, <http://www.mw.mil.pl>

Polish Ecumenical Council, <http://ekumenia.pl>
 Polish Humanitarian Action, <http://pah.org.pl>
 Polish Red Cross, <http://www.pck.pl>
 Polish Scout Union, <http://eng.zhp.pl>
 Public Procurement Office, <http://www.uzp.gov.pl>
 Public Procurement Office, <http://www.uzp.gov.pl>
 State Fire Service, www.straz.gov.pl (www.kgsp.gov.pl)
 State Inspection for Environment Protection, <http://www.gios.gov.pl>
 Volunteer Fire Brigade of the Republic of Poland, <http://zosprp.pl/>
 Water Volunteer Rescue Service, www.wopr.pl

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Expert interviews

Interview with a PhD candidate in the field of crisis management. Date of the interview: 11 November 2014.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

PORTUGAL

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ATOS (Diego Alexander Chanto García, Darío Ruíz, Alejandro Afonso Spinola)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ECORYS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

In Portugal, civil protection is an activity developed by the Government, the autonomous regions, local authorities, the citizens and all the public entities which main goals are to avoid accidents or disasters and protect and rescue people.

Civil protection activity is permanent, multidisciplinary and multisector, fitting to all agencies and departments of the Public Administration to promote the necessary conditions for its implementation in a decentralized manner, without prejudice to mutual support between organizations and the same level entities or through higher levels.

The National System of Civil Protection (Sistema Nacional de Protecção Civil, SNPC) was created in 1975, and the structure and the duties were established under the Decreto-Lei 510/80 (Decree-Law 510/80) on October 25, 1975.

The civil protection structure is organised at the national, regional and municipal levels.

In 2005 the Government decided to create a new firefighters department specialized in fighting forest fires. Two years later, in 2007, the Special Force Canarinhos Fire was created under the Artigo 19º do Decreto-Lei n.º 247/2007 (Article 19 of Decree-Law No. 247) of 27 June 2007. The Special Force Canarinhos Fire (Força Especial de Bombeiros Canarinhos, FEBC) is a particular branch of civil protection, organized and integrated into the operation device of the National Civil Protection Authority.

National crisis management & disaster response concept:

The entire civil protection system integrates the National Authority for Civil Protection (ANPC), the Regional Services for Civil Protection in the Azores and Madeira (SRPC), the District Commands for Relief Operations (CDOS, one in each district) and the Municipal Civil Protection Services (SMPC, one in each municipality).

The heads of the administrative civil protection units (district commanders) are nominated by the National Authority for Civil Protection.

The responsibility for the civil protection policy lies with the Government, which shall introduce, in the respective programme, the main orientations to be adapted or proposed in this field of intervention. The Prime Minister and the Ministry of the Interior are therefore responsible for directing the civil protection policy at national level.

At regional/district level, there are District Civil Protection Commissions (responsible for the political coordination and policy advice to the civil governor) and District Coordination Centres (operational coordination).

In each district there is also a District Command for Relief Operations, a branch of the Portuguese Civil Protection Authority. In the autonomous regions of the Azores and Madeira there are Regional Civil Protection Services, depending on the regional government.

The civil governors of each of the 18 districts in the mainland and the presidents of the Azores and Madeira autonomous regions, in the exercise of their function as the responsible entity for the civil protection policy in each district, are responsible for activating, during the occurrence of a serious accident or catastrophe, the adequate civil protection actions aimed at prevention, aid, assistance and rehabilitation for each case.

At local level, there are Local Civil Protection Services depending on the mayor. Political and operational coordination is assured by the municipal civil protection organisations. The mayor, in the exercise of his functions as the responsible entity of the civil protection policy in the municipality, is responsible for activating, during the occurrence of a serious accident or catastrophe, the adequate civil protection actions aimed at prevention, aid, assistance and rehabilitation for each case.

Soon after a major disaster cannot be solved either by the means assigned to the municipality or to the district, where the disaster takes place, the ANPC activates the National Coordination Centre to coordinate and control the relief operations and logistics support at national level.

A National Command for Relief Operations operates 24 hours a day in the ANPC to control and manage the current situation.

Inter-ministerial coordination is integrated by the National Civil Protection Commission (CNPC), an advisory board that assures coordination between different ministries and organisations and provides policy advice to the Government.

Inter-agency coordination is ensured by the National Coordination Centre (CCON). CCON is the coordination body of the Integrated System for Relief and Protection Operations (SIOPS). SIOPS is a set of rules and procedures, which guarantee that civil protection agents act, at the operational level, in a coordinated way and under a unique command.

Operational organisations act under civil protection command according to the rules of the SIOPS. Decisions are made by the National Coordination Centre.

According to the nature of the disaster, specific organisations may be called to act under civil protection authority (e.g. the Water Institute, the Forest Services, etc.).

In terms of civil protection, Portugal has bilateral agreements with Cape Verde, France, Morocco, Russia and Spain.

Key stakeholders: ANPC, CCON, CDOS, FEB, SIOPS, SMPC, SNPC, SRPC.

On the one hand, as volunteers, the Portuguese Red Cross exercises, in cooperation with the additional agencies and in harmony with its proper statutes, civil protection functions in the domains of intervention, support, aid, sanitary and social assistance and Humanitarian associations of voluntary fire-fighters are the main organisations.

On the other hand the National Association of Portuguese Municipalities, the National Fire School and the Portuguese Fire League are the main private actors.

Niche crisis management capabilities of interest to the EU and other MSs:

SIRESP: Sistema Integrado das Redes de Emergência e Segurança de Portugal (<http://siresp.com/>) security and emergency network of Portugal.

SIOPS - Integrated System for Relief and Protection Operations

Table of Contents

PORTUGAL Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1287
Overview	1288
Table of Contents	1290
List of Figures	1291
List of Tables.....	1291
List of Abbreviations.....	1292
1 Policy	1294
1.1 Risk Assessment	1294
1.2 Policy and Governance	1296
1.2.1 Strategy scope and focus	1297
1.2.2 Monitoring and analytical support to policy making; R&D	1298
1.2.3 Policy for Prevention	1301
1.2.4 Policy for Preparedness	1302
1.2.5 Policy for Response	1303
1.2.6 Policy for Relief and Recovery	1303
1.3 Financing	1304
1.3.1 Investing in preparedness	1304
1.3.2 Investing in consequence management	1305
1.4 Policy review, Evaluation & Organisational Learning	1305
1.4.1 Post-Disaster Assessment	1305
1.4.2 Departmental Lessons Learned systems	1306
1.4.3 Centralised (national) Lessons Learned system	1306
1.4.4 Regular policy reviews	1307
1.5 Resilience	1307
1.6 Information sharing and data protection	1307
2 Legislation	1308
2.1 Crisis (emergency, disaster) management concept.....	1308
2.2 General crisis (emergency, disaster) management law.....	1309
2.3 Emergency rule	1310
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1311

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1312
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1312
2.7	Legal regulations for international engagements of first responders and crisis managers	1313
3	Organisation	1315
3.1	Organisational chart.....	1315
3.2	Organisational cooperation	1319
4	Procedures	1321
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1321
4.2	Operations planning	1321
4.3	Logistics support in crises	1322
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1322
5	Capabilities	1325
5.1	Human resources	1325
5.2	Materiel (non-financial) resources	1327
5.3	Training	1328
5.4	Niche capabilities	1330
	Resources	1331
	Legislative acts	1331
	Online resources	1331

List of Figures

<i>Figure 1: Research lines and transversal programmes of CIIMAR</i>	<i>1300</i>
<i>Figure 2: Organisational Chart of the National Authority for Civil Protection in Portugal.....</i>	<i>1317</i>
<i>Figure 3: Structure of the National Authority for Civil Protection in Portugal.....</i>	<i>1317</i>

List of Tables

<i>Table 1: Major disasters in Portugal</i>	<i>1296</i>
<i>Table 2: Active members, distributed by function.....</i>	<i>1326</i>
<i>Table 3: Training in different areas of knowledge</i>	<i>1326</i>
<i>Table 4: Equipment for intervention in different scenarios.....</i>	<i>1327</i>

List of Abbreviations

Abbreviation / acronym	Description
ANPC	National Civil Protection Authority
APC's	Civil Protection Agents
BSG	Budget Support Group
CCO	Operational Coordination Centres
CCOD	District Operative Coordination Centres
CCON	National Coordination Centre
CDOS	District Command for Relief Operations
CIIMAR	Interdisciplinary Centre of Marine Environmental Research
CNOS	National Command for Relief Operations
CNPC	National Commission for Civil Protection
CNPCE	National Council for Civil Emergency Planning
DNB	National Fire Department
DRR	Disaster Risk Reduction
EAPS	Psychosocial Support Teams
EAUF	Analysis and Use of Fire Team
EUSF	The EU Solidarity Fund
EBH	The Environmental Biology and Health
EFB	The Ecology and Functional Biodiversity
ENB	National School of Fire
ERAS	Recognition and Situation Assessment Team
ETIC	Imaging Technique School of Image and Communication
EUSF	EU Solidarity Fund
FEBC	Special Force Fire Canarinhos
FTS	Financial Tracking System
GHD	Good Humanitarian Donorship
IARCC	International Association of Risk and Crisis Communication
IES	The Integrated Environmental System
INAG	The Water Institute
INEM	National Institute of Medical Emergency

IPAD	Portuguese Institute to Support the Development
MER	The Marine Ecosystems and Resources
NATO	North Atlantic Treaty Organization
NSRF	National Strategic Reference Framework
NSS	Security Centre and Health
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
OTE	operators of emergency telecommunications
PDNAs	Post-Disaster Needs Assessments
PNEPC	National Civil Protection Emergency Plan
PONSE	National Plan of Operations of the Serra da Estrela
REPC	Strategic Network of Civil Protection
RS	Recovery-Savers group
SFDRR	Sendai Framework for Disaster Risk Reduction
SGO	Operations Management System
SIOPS	Response the Integrated System of Protection and Rescue Operations
SMPC	Municipal Civil Protection Services
SNGC	National System of Crisis Management
SRFF	Standby Recovery Financing Facility
SF	Structural Funds
SUDOE	Southwest European
UAV	Unit Support of Volunteers

1 Policy

1.1 Risk Assessment

Portugal is vulnerable to various types of natural risks. The erosion of the Portuguese coastline has worsened over the last century, placing people and properties at risk, as well as natural heritage. In the centre and north of the country, the main areas at risk of coastal erosion are located between the mouth of the River Douro and Nazaré, the Espinho-Ovar and Aveiro–Areão stretches standing out in particular, as well as that from Caminha to the mouth of the Douro. In the south of the country, of note is the stretch between Vilamoura and the mouth of the River Guadiana, where the cliffs have receded and sea breaches have been verified.

Around the 35% of continental Portugal is at risk of desertification. The most susceptible areas are located in the Alentejo, the Algarve coast, Vale do Douro, Trás-os-Montes and the Raia area in Beira Baixa.

Flooding also constitutes a natural risk deserving of attention.

Drought situations are frequent in continental Portugal, temporary natural phenomena that are distinguished from other catastrophes as they occur more imperceptibly, their advance is verified more slowly, they last for longer periods of time, can extend over far larger surface areas and recovery from them is much slower, at times causing significant socioeconomic impacts, particularly on agriculture and cattle farming and, also, on energy production.

Wildfires represent the greatest risk to Portugal's forests and they have led to a high number of personal accidents and significant economic losses. The area affected by wildfires in Portugal every year has been larger than the forest area and this has been an important contributing factor to desertification.

Portugal, in the context of plate tectonics, is located between the Eurasian and African plates. The great historical earthquakes had their epicentres located in the crash Azores-Gibraltar with an approximate magnitude of 8.75. Tsunamis are produced as a consequence of earthquakes. The greatest tsunami registered was produced by the Azores-Gibraltar earthquake and it had a height of 15 meters.

In other words, in Portugal, key risk areas of concern are; Floods, forest fires, tsunamis, earthquakes (the Azores are subject to severe earthquakes), heat waves and storms.

The resolution of the Council Cabinet 87/2013 of 11 December published the approval of the National Civil Protection Emergency Plan (PNEPC). This Plan is a support to the civil protection operations instrument in case of imminence or occurrence of a major accident or disaster in continental Portugal, with a view to enabling the drive direction of the actions to develop the technical and operational coordination of the means to commit and the adequacy of exceptional measures to be adopted.

The PNEPC was created in order to control a series of natural or technological risks that can take place in continental Portugal such as adverse weather conditions, hydrological and geological risks, transport accidents, industrial activity and urban areas and fires in rural or forest areas.

The PNEPC can guarantee all the conditions for improving the efficiency and effectiveness of the civil protection agents and services and contributes to increase the resilience in every phase of the emergency cycle.

The emergency plans are made depending on the guideline issued by the National Commission for Civil Protection (CNPC), in particular:

- Hazards classification.
- Precautionary measures that must to be taken.
- Identifying the ways and resources deployed in a disaster situation.
- The operative structure that must guarantee how to take a permanent control of the situation.
- The definition of the responsibilities that involve the public or private organisations and structures with experience in the civil protection area.

In function of the specific surface, the emergency plans could be national, regional, district or municipal and depending on its purpose they could be general or specific emergency plans.

The most important disasters in Portugal in the last 25 years are listed below:

Year	Disasters
2010	Floods, Madeira, 42 deaths, 100 injured, disruption of water supply systems
2006	Extreme temperature, 41 dead
2005	Wildfire, 15 dead
2004	Wildfire, 2 dead
2003	Wildfire, 14 dead
2003	Extreme temperatures, 2696 dead in August, 41 dead in July
2001	Floods, 6 dead
2000	Storm, 4 dead
1998	Earthquake in Azores, 8 dead, 110 injured, 1600 homeless, 500 destroyed houses, damage estimated at EUR 60 million
1997	Floods and mudslides in the Azores; 29 dead, 60 homeless, damage estimated at EUR 15 million
1997	Floods in Lisbon, Algarve and Alentejo; 11 dead, 44 injured, 300 homeless, 95 collapsed/destroyed buildings, destruction of agriculture assets and crops
1995-1996	Floods in the districts of Porto, Aveiro, Coimbra, Viseu, Satarém and Lisbon; 12 dead, 1,340 homeless; damage estimated at EUR 80 million
1995	Forest fires in the north/central region, 170,000 hectares destroyed
1992	Aircraft crash at Faro Airport; 58 dead, 238 injured

1991	Forest fires north of Tejo, 182,000 hectares destroyed
1991	Aircraft crash at Funchal; 86 injured
1991	Aircraft crash at Funchal airport; 6 dead
1990	Forest fires north of Tejo, 137,000 hectares destroyed
1990	Oil slick from the Cypriot tanker Ogennitor in the harbour of Sines, 500 km ² polluted by oil

Table 8: Major disasters in Portugal¹⁸²³

1.2 Policy and Governance

The National Strategic Reference Framework (NSRF) describes in a specific section how important the prevention, management and monitoring of natural risks are. Portugal's vulnerability to diverse types of natural risks, with particular mention for coastal erosion, whose worsening represents a very worrying situation, placing both people and property at risk and natural heritage, is one of the intervention priorities in this field. Desertification, which affects a considerable percentage of the continental territory, as well as flooding, also constitute natural risks that deserve attention within the framework of the programming of the structural interventions. Also a priority for this type of intervention is the prevention of wildfires and the risks to public health.

Furthermore, it should be stressed that the existence of a comprehensive and integrated system of prevention, warning and management of natural and technological risks and the repair of the damage associated with them constitutes one of the essential aspects of territorial enhancement and a priority for territorial planning and sustainable development policy.

The Civil Protection structure is organized in four levels:

- National
- Regional
- District
- Municipal

The conduct of civil protection policy is the responsibility of Government, which, in the respective program, must create the main guidelines to adapt or to propose that domain. The Prime Minister is the manager of civil protection policy.

The responsible for civil protection of the government, in co-operation with the District Operational Commander and the civil protection agents must resolve any problem in a serious accident or catastrophe case. They should know how to act in every different situation such as:

- Civil protection prevention
- Rescue, assistance of people and appropriate rehabilitation of buildings or historical monuments.

The mayor of the town hall is the responsible for activating the civil protection policies in the imminence or occurrence of a major accident or disaster, civil protection prevention, rescuing and assisting people and the appropriate recovery in each case.

¹⁸²³ Major disasters in Portugal. Accessed January 26, 2016
http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt-6.html/

1.2.1 Strategy scope and focus

The civil protection task is to prevent collective risks and the occurrence of serious accidents or resulting disasters; to attenuate collective risks and to limit their effect; to rescue and to assist people and other living beings in danger; to protect cultural and environmental assets and other assets of high public interest; and to support the reestablishment of normality in the life of people living in the areas affected by serious accidents or disasters.

The CNPC is chaired by Minister for Internal Affairs and is composed of:

- Delegates of Justice, Environment, Economy, Agriculture and Forestry, Transport, Communication, Social Security, Health and Scientific Research Ministries;
- The President of the National Authority of Civil Protection;
- Fire Portuguese league and the National Association of Professional Firefighters.

Representatives of the Armed Forces, the National Republican Guard, Public Security Police, the National Council for Civil Emergency Planning, the Office of Security, the Maritime Authority, the Aeronautical Authority and the national Institute of Medical Emergency also participate in this committee.

Emergency plans are approved by the CNPC, according to the advice issued by the National Civil Protection Authority (ANPC).

Civil protection planning is performed according to the guidelines laid down in Regulation 25/2008. This Regulation defines that emergency plans at national, regional, district and municipality levels are mandatory. These plans follow an all-hazard approach.

By ensuring the necessary activities and means of prevention, warning and risk management and the repair of the damage associated with them, this system contributes to increasing the safety indices, thereby constituting a factor for economic and social development and cohesion with clearly positive effects in terms of competitiveness and quality of life.

The central functions of the system are to increase the country's ability to prevent and manage risks, centred generally on the following objectives:

- To guarantee the conditions, means and resources necessary and adequate for the centralized and permanent treatment of data and information relevant for the identification, evaluation, prevention, warning, management and correction of the diverse situations of vulnerability and risk;
- To ensure the conditions for the centralized and integrated programming and planning of the means and actions of prevention, warning, risk management and repair of associated damage;
- To make the rational and coordinated use of means, equipment and resources viable, ensuring the capacity to respond rapidly, efficiently and effectively, coherently and in integrated fashion and with recourse to innovative and technological means;
- To create conditions for the adequate protection of facilities of structural importance in situations of natural or technological risk;
- To promote the inter-communication and inter-operability of public and private means and entities involved in the prevention, warning, risk management and repair of associated damage, orienting their respective participation according to the speed and quality of reaction to risk situations;

- To valorise and include the adequate participation of civil society, bolstering its respective involvement from the perspective of a permanent approach to risk prevention and minimization of its respective effects.

1.2.2 Monitoring and analytical support to policy making; R&D

In Portugal, the Centre for Environmental and Marine Studies from the University of Aveiro is dedicated to R&D actions and also has a series of thematic lines such as:

- Marine Ecosystems and Resources;
- Environmental Biology and Health;
- Ecology and Functional Biodiversity;
- Integrated Environmental Systems.

Global warming may have severe consequences on the lives of people and it is very important to take care of the marine ecosystem to avoid and prevent severe risks. The Marine Ecosystems and Resources (MER) thematic line focuses on sustainable challenges in fisheries, aquaculture, and bio prospection and energy resources.

MER thematic line is based on multidisciplinary research, monitoring, advice, training, dissemination and outreach to underpin integrated assessment, management and governance of coast and ocean systems, deliver food security, preserve biodiversity, and maintain ecosystem services. It supports implementation of the European Water, Habitats and Marine Strategy Framework Directives and the revised Common Fisheries Policy in Portugal, promoting sustainable regional development. Its main objectives are:

- Technology for coastal and ocean observation: It develops environmental observation and information systems actions. It owns innovative coast and ocean observations systems for acquisition of chemical, geological, oceanographic, biological and ecological data.
- Training, dissemination and outreach: Improving societal awareness and skills; providing knowledge and tools for effective decision making and public engagement in the protection and sustainable use of marine resources; promoting synergies between academia and industry; developing advanced training.¹⁸²⁴

The Environmental Biology and Health (EBH) thematic line emerges from the need to give a special attention to the link between ecosystems and human well-being, which is seen as the main target of managing the socio-economic systems. The EBH centres its activity in environmental sustainability; the development of biological indicators that contribute the development of environmental instruments; human health risk assessment identifying some of the contaminants and pathogens that have emerged in recent years and anticipate situations that endanger human health; ecosystem services and human well-being, improving the knowledge of ecosystems and their services. Its main objectives are:

- *To provide ecological risk assessment, by evaluating the probabilities and magnitudes of harm that might come from environmental contaminants, including emergent contaminants of concern, and emergent pathogens;*

¹⁸²⁴MER thematic line of the Centre for Environmental and Marine Studies. Accessed February 12, 2016 <http://www.cesam.ua.pt/index.php?menu=76&language=eng&tabela=geral>

- *To access the flows and benefits driven from ecosystem services at present and in possible future scenarios, regarding social, economic and environmental issues as inseparable and interdependent components of human progress and human well-being;*
- *To support new risk assessment guidelines foreseeing environmental and public health protection;*
- *To promote technical and advance training courses;*
- *To promote outreach activities, including disseminating to students from schools, encouraging and motivating them to pursue careers in science; To engage citizens enhancing academics-stakeholders interactions; To strengthen international cooperation, namely with Portuguese speaking countries;*¹⁸²⁵

The Ecology and Functional Biodiversity (EFB) thematic line generates innovative solutions to the growing challenges associated with the environmental conservation, protection and sustainable use of terrestrial, freshwater and marine ecosystems.

The Integrated Environmental System (IES) thematic line aims to contribute to innovative products, services, models and processes that can benefit the environment by preventing and reducing present and future anthropogenic pressures on natural resources. Regarding risk and climate change adaptation, Portugal is the more vulnerable European country, according to all known studies and scenarios. The main risks include natural and anthropogenic phenomena, such as emission and transport of emerging pollutants, desertification, soil erosion, salinization of soils and decline organic matter, coastal erosion, floods, landslides, droughts, wildfires and hazards. Taking into account the existing strategic and operational instruments, as well as the identified needs, IES research will aim at increasing the knowledge about the risks affecting the country, through assessment of vulnerabilities, monitoring and modelling, and at contributing to national, regional and local policies on risk management, through planning from a perspective of resilience and adaptation.¹⁸²⁶

On the other hand, the Interdisciplinary Centre of Marine Environmental Research (CIIMAR) also is a research and advanced training institution hosted by the University of Porto. Its mission is to develop exceptional-quality research, promote technological development and support public policies in the area of Marine and Environmental Sciences. CIIMAR is focused in three research line that may be represented in figure 1:

¹⁸²⁵ IES thematic line, from the Centre for Environmental and Marine Studies. Accessed February 12, 2016 <http://www.cesam.ua.pt/index.php?menu=73&language=eng&tabela=geral>

¹⁸²⁶ EBH thematic line objectives, from the Centre for Environmental and Marine Studies. Accessed February 12, 2016 <http://www.cesam.ua.pt/index.php?menu=75&language=eng&tabela=geral>

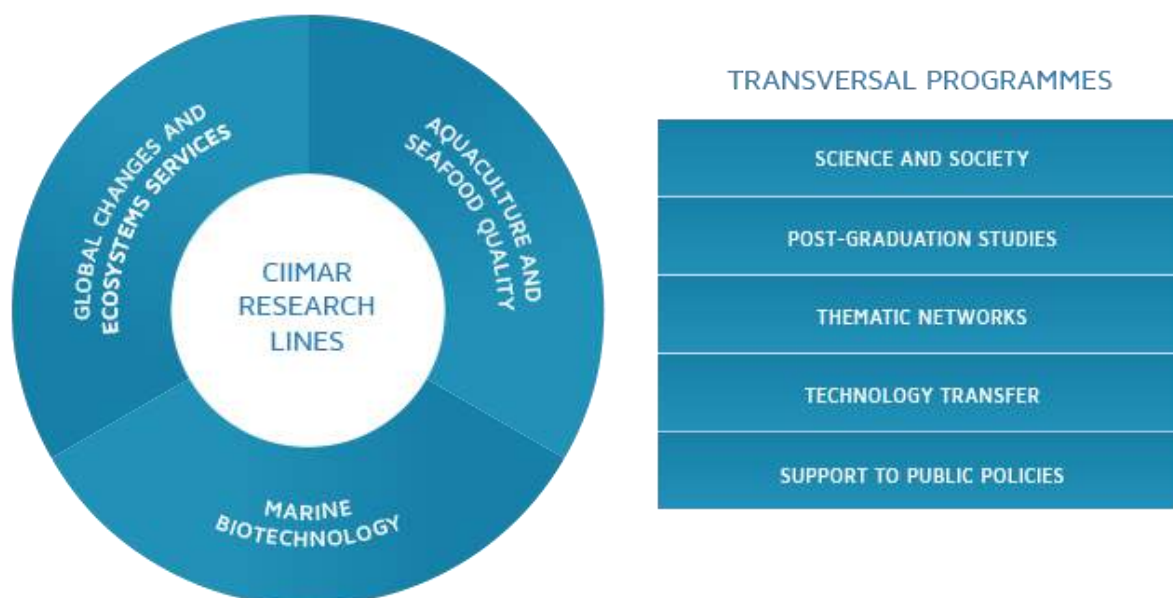


Figure 8: Research lines and transversal programmes of CIIMAR¹⁸²⁷

One of the main areas of research is the Global Changes and Ecosystems Services. More than one third of the world's population lives in coastal areas and depends on the resources and services provided by the aquatic ecosystems. The objective of this Thematic Line is to contribute to develop basic knowledge and tools to support the protection and management of marine, estuarine and freshwater ecosystems and inter-related compartments for the sustainable exploitation of their resources, fostering at the same time the emergence and production of valuable goods and services. It is organized into 15 Research Groups that develop work on the following areas: Establishment of an ocean observatory system that will improve the detection of physical changes in the ocean and improve the accuracy of future predictions and early warning systems, expanding risk assessment capabilities and the development of tools and strategies to address global climate change issues; Unravelling marine biodiversity, ecosystem function and management; biogeochemical cycles; Environmental risk assessment; Sustainable exploitation of fisheries; Human impact in coastal, open and deep sea ecosystems; Mechanisms of toxicity of natural elements and man-made chemicals; Combined effects of multiple stressors such as natural and anthropogenic priority and emergent chemicals, ocean acidification and hypoxia.¹⁸²⁸

The Instituto Dom Luiz (Don Luiz Institute, DLI) has a series of research groups such as:

- Climatology and Climate Change which main objectives are:
 - To develop statistical models and predictability studies at the monthly-seasonal range in the Atlantic-European region;
 - To evaluate different types of weather driven natural hazards: floods, droughts, landslides and heat waves;
 - To assess the impact of volcanoes, solar storms and variability on the Earth's magnetic field and climate.
- Coastal hazard and Warning Systems: Coastal Hazards are an important topic of research in the DLI, due to the impact of the large tsunamis in the southern

¹⁸²⁷ Research lines and transversal programmes of CIIMAR. Accessed February 12, 2016 http://www.ciimar.up.pt/images/research_grafico.png

¹⁸²⁸ Global Changes and Ecosystems Services of CIIMAR. Accessed February 12, 2016 <http://www.ciimar.up.pt/researchgroups.php?rl=global-changes-and-ecosystems-services>

Portuguese coasts and to the vulnerability of a major part of the territory to coastal hazards. This research group has a series of objectives:

- To establish the scientific basis for tsunami warning and mitigation;
- To develop innovative observational methods to quantify beach changes at different spatial and temporal scales;
- To develop strong cooperation with end users, namely civil protection, coastal management authorities, local authorities and other entities involved in coastal planning and management;
- Seismic and Volcanic Hazards: The researches of this group are focused in the Azores archipelago and other Macaronesian volcanic archipelagos such as Madeira, Cape Verde and Canary Islands located in oceanic intraplate domain. The main objectives are:
 - To constrain the seismic potential of active faults in the study regions and characterize their seismic cycle using modern techniques in Active Tectonics and Paleo seismology, for providing a complementary earthquake data set to complete the historical and instrumental earthquake catalogues using the geological information;
 - To search for evidences of past and of potential or nucleating collapses of volcanic edifices, as potential sources for major tsunamis, and search for evidences of correlative tsunamis and their characterization;
 - to predict ground motions due to strong earthquakes and the potential damage on built structures;

1.2.3 Policy for Prevention

In 2005 Portugal subscribed to the Hyogo Framework for Action and has taken concrete steps to integrate and streamline Disaster Risk Reduction (DRR) into national development strategies and legislation, recognizing the importance of DRR for the promotion of sustainable economic growth and progress.

The establishment of the Portuguese National Platform for Disaster Risk Reduction, in May 2010, was a key issue towards better coordination of prevention, preparedness, and response activities.

Paying attention to the Hyogo Framework for Action there are some rules named:

- *Each State has the primary responsibility to prevent and reduce disaster risk, including through international, regional, sub regional, transboundary and bilateral cooperation.*
- *Disaster risk reduction requires that responsibilities have to be shared by central Governments and relevant national authorities, sectors and stakeholders, as appropriate to their national circumstances and systems of governance;*
- *Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens;*

- *While the enabling, guiding and coordinating role of national and federal State Governments remain essential, it is necessary to empower local authorities and local communities to reduce disaster risk, including through resources, incentives and decision-making responsibilities, as appropriate;*
- *Disaster risk reduction requires a multi-hazard approach and inclusive risk-informed decision-making based on the open exchange and dissemination of disaggregated data, including by sex, age and disability, as well as on easily accessible, up-to-date, comprehensible, science-based, non-sensitive risk information, complemented by traditional knowledge;*
- *While the drivers of disaster risk may be local, national, regional or global in scope, disaster risks have local and specific characteristics that must be understood for the determination of measures to reduce disaster risk;¹⁸²⁹*

In Portugal another policy to reduce disaster risks is the improvement of the critical infrastructures. Critical infrastructures have been increasing exponentially because they play key roles for the economy and security of the countries, particularly the most developed. Their prolonged downtime may cause tremendous losses to the economy due to the shutdown of the strategic activities and may jeopardize the response capacity of States.

The protection of critical infrastructures won legal support in Portugal when, on May 9, 2011, the Decree-Law 62/2011 was published. The Decree-law establishes the procedures for the identification and protection of critical infrastructures for health, safety and well-being of society in energy and transport in case of natural disaster or catastrophe, according to Directive No. 2008/114 /CE of the Council of 8 December.

The protection of critical infrastructures began in 2004, simultaneously with the first initiatives in the European Union with a view to build a strategy and an action plan for protecting and increasing the resilience of critical infrastructures.

1.2.4 Policy for Preparedness

Paying attention to the section 1.2.3, in May 2010, Portugal established the Portuguese National Platform for Disaster Risk reduction, aimed to have a better coordination of prevention, preparedness and response activities.

Government also has to emphasize the importance of disaster preparedness and building back better after a disaster strikes. Good preparedness involves all groups of society male or female, old and young.

Portugal also follows a series of common tips to be prepared in a risk situation or catastrophe according to the Sendai Framework for Disaster Risk Reduction (SFDRR).

The steady growth of disaster risk, including the increase of people and assets exposure, combined with the lessons learned from past disasters, indicates the need to further strengthen disaster preparedness for response, take action in anticipation of events, integrate disaster risk reduction in response preparedness and ensure that capacities are in place for effective response and recovery at all levels.

¹⁸²⁹ The Hyogo Framework for Action. Page number 6. Accessed January 26, 2016 <http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf/>

1.2.5 Policy for Response

As a policy for response the Integrated System of Protection and Rescue Operations (SIOPS) is the set of structures, standards and procedures which ensure that all the civil protection agents and the entities with special duty of cooperation operate, at operational level, articulately under one command without prejudice to the respective hierarchical and functional dependence. The SIOPS is regulated in specific legislation.

SIOPS aims to respond to situations of imminent or serious accident or disaster.

According to the Article 26 in the Decree 134/2006 on July 25, 2006 SIOPS must provide an operational response device with permanent intervention teams intended for priority intervention in relief missions.

SIOPS Institutional coordination is assured at the national and district levels by the so called Operational Coordination Centres (Portuguese acronym CCO). The CCO is integrated by representatives from the entities which intervention is justified in accordance with each concrete occurrence.

CCO's are responsible for the management of the operational participation of each force or service in the rescue operations.

The CCO main objectives are:

- To ensure coordination of resources and logistical support for relief operations and to provide assistance in emergency cases;
- To collect relevant strategic information for protection and rescue missions;
- To inform continuously the political authority of all relevant facts that could lead to bottlenecks in operational responses in emergency cases;
- To guarantee the management and monitoring of every case of emergency and to guarantee an appropriate response under the Integrated System of Protection and Rescue Operations.

1.2.6 Policy for Relief and Recovery

In Portugal, in each district, there is also a District Command for Relief Operations, a branch of the Portuguese Civil Protection Authority. In the autonomous regions of the Azores and Madeira there are Regional Civil Protection Services, depending on the regional government.

Soon after a major disaster cannot be solved either by the means assigned to the municipality or to the district, where the disaster takes place, the ANPC activates the National Coordination Centre to coordinate and control the relief operations and logistics support at national level.

A National Command for Relief Operations operates 24 hours a day in the ANPC to control and manage the current situation.

Inter-agency coordination is ensured by the National Coordination Centre (CCON). CCON is the coordination body of the SIOPS - a set of rules and procedures, which guarantee that civil protection agents act, at the operational level, in a coordinated way and under a unique command.

The ANPC shall perform the following tasks within the area of protection and relief operations:

- To guarantee the organic and territorial continuity of the relief operation command system;
- To monitor all protection and relief operations at local and autonomous regional levels, and to foresee the need for the intervention of means at district or national level;

- To plan and guarantee the use, under the law, of private or public means available to deal with situations of serious accidents or disasters;
- To ensure the horizontal coordination of all civil protection actors and other structures and public services playing a protection-and-relief-related role.

In Portugal there is a National Command for Relief Operations, CNOS for short, which is headed by the national operational commander, assisted by the 2nd national operational commander and by three national operation deputies.

The CNOS comprises the planning, operations and information cells, the logistics cell, the air resources cell and the communications cell.

Powers granted to CNOS and to cells referred to in the preceding paragraph are provided for in the scope of the SIOPS, approved by Decree-Law No 134/2006, of 25 July.

At a district level each district shall be provided with a District Command for Relief Operations, CDOS for short, headed by a district operational commander, assisted by the 2nd district operational commander.

By order of the member of the Government in charge of the Internal Administration area, taking into account the needs arising from natural, technological and human activity risks, the CDOS may be joined by a district operation deputy.

Powers granted to CDOS are provided for in the scope of the SIOPS, approved by Decree-Law No 134/2006, of 25 July.

CDOS shall also ensure a permanent operational articulation with the municipal operational commander.

1.3 Financing

Portugal does report its funding decisions to the Office for the Coordination of Humanitarian Affairs (OCHA) Financial Tracking System (FTS). The annual (consolidated) Portuguese humanitarian budget is not transparently available in any form, during the budget year, even within the Portuguese Institute to Support the Development (IPAD), which further hinders accountability and transparency.

1.3.1 Investing in preparedness

Currently about 15% of Portugal's aid budget is channelled through IPAD, which prevents IPAD from acting as a single point of financial oversight. Financial transfers take place between Lisbon line ministries and partner countries' ministries, and thus embassies are not involved in deciding or arranging disbursements.

Portuguese crisis management and civil protection is changing rapidly and this influences the procedures for investing in preparedness. In Portugal, each of the 18 districts combining the efforts of the fire brigade, police, public health institutions and the National Authority of Civil Protection (ANPC), are mainly responsible for the operational mitigation of a crisis.

The last year the ANPC spent EUR 74.257.786 on combating forest fires which represents a 10.3 percent more than in 2011, according to data from the ANPC.

Portugal has subscribed to the Hyogo Framework for Action (HFA) in 2005 and has, since then, taken concrete steps to integrate and streamline disaster risk reduction in its national development strategies. Furthermore, recognizing the importance of disaster risk reduction for the promotion of

sustainable economic growth and progress, Portugal has sought to include Disaster Risk Reduction (DRR) concerns in its development and humanitarian aid policies, in particular in the bilateral cooperation maintained in this regard with African Portuguese speaking countries.

The competent ministries and agencies will execute their activities using their budget. The public administration dedicates part of its budget investing in Disaster Risk Reduction (DRR) for resilience that includes public and private investment to prevent and reduce losses, for example ensuring the safety of critical facilities such as hospitals, power plants, roads and schools.

Infrastructure investment boosts economic growth beyond its direct impact on the stock of capital. Better infrastructure, particularly in transport, can facilitate and enhance the division of labour, encourage the adoption of new organisational practices, and also improve the operating methods of civil protection bodies in case of emergency.

Government also has to emphasize the importance of disaster preparedness and building back better after a disaster strikes. Good preparedness involves all groups of society male or female, old and young.

The HFA provides 7 targets to reduce disaster risk. There are 4 targets to reduce disaster losses.

- To reduce global disaster mortality by 2030. Over 700 000 people around the world lost their life from disasters between 2005 and 2015;
- To reduce the number of people affected globally by 2030. In the last 10 years almost 1.4 million people were injured and over 24 million have been made homeless;
- To reduce direct disaster economic lost in relation to GDP. 1 EUR invested in resilience can save 7 EUR or more in response and recovery costs;
- To reduce damaged infrastructures.

The HFA also sets target for increasing the number of countries with reduction risk reduction strategies, increasing the international cooperation to developing countries and substantially increasing public access to early warning systems.

1.3.2 Investing in consequence management

Information on this subject could not be found.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The Post-Disaster Needs Assessments (PDNAs) conducted under the leadership of affected country governments are the most important tasks of the Standby Recovery Financing Facility (SRFF). The flagship products of SRFF are the reports that these assessments generate. These are reports of the respective governments prepared with the assistance of GFDRR and the international community at large. They are increasingly being used by governments and the international development community to base the recovery and reconstruction plans and programs upon. They are also as the base document for discussions to determine international development assistance in cases requiring

external assistance including leveraging of targeted or additional assistance from the World Bank and other traditional donors.

After a series of natural disaster in Portugal, a comprehensive national assessment on natural and man-made risks was established by the National Emergency Plan. An important project on seismic risk at Lisbon was carried out by an interdisciplinary team covering:

- *Historical seismicity;*
- *Seism tectonic environment;*
- *Building stock;*
- *Population's dynamic;*
- *Damage simulations;*
- *Emergency management;*
- *Prevention measures.*

Detection and early warning systems for adverse weather conditions and forest fires have been developed so far.

The Water Institute (INAG) has developed a very effective Detection and Warning System for Floods whose main objective is to provide real time hydrometric data 24 hours a day on the watershed of the Portuguese big rivers.

An extensive population awareness and information campaign has been in force since 1992 through the dissemination of around 50 million leaflets containing security procedures and self-protective measures upon earthquakes, floods, storms, domestic and forest fire, saving water resources, using domestic gas, etc.

*Frequent training and exercises for authorities, civil protection agents, response units and vulnerable groups of population have been met at national, district and municipal level.*¹⁸³⁰

1.4.2 Departmental Lessons Learned systems

According to the Organisation for Economic Co-operation and Development (OECD),

A lack of resources has meant that Portugal's humanitarian programmes are not systematically monitored or evaluated, and Portugal has not yet participated in joint evaluations of multilateral partners. Instead, Portugal relies on narrative reports and audited accounts from its NGO partners, and accepts global reports from multilateral organisations. However, lesson learning exercises are conducted when civil protection teams return from the field. Sharing these lessons with other partners/donors could help promote mutual learning, and would comply with the Good Humanitarian Donorship (GHD) principles to support learning and accountability initiatives. An overall programme evaluation of Civil Protection's emergency deployments would also be useful, especially if Portugal continues to use this mechanism as its primary humanitarian aid instrument.

1.4.3 Centralised (national) Lessons Learned system

Information on this subject could not be found.

¹⁸³⁰ Portugal: end of IDNDR assessment report,
http://www.preventionweb.net/files/32520_endidndrassessmentportugal.pdf

1.4.4 Regular policy reviews

Information on this subject could not be found.

1.5 Resilience

In Portugal, particularly Lisbon has joined the 100 Resilient Cities Challenge, an initiative of the United Nations Organization which seeks to find 100 cities that are ready to build resilience to the social, economic, and physical challenges that cities face in an increasingly urbanized world.

According to the 100 Resilient Cities Challenge disruptions or catastrophes cannot be exactly predicted. But countries can control how they respond to those challenges. Some of the resilience challenges that Lisbon is facing are:

- Aging infrastructure;
- Declining or aging population;
- Earthquake;
- Flooding (Coastal and Rainfall);
- Landslide;
- Rising sea level and costal erosion.

The main objectives of this challenge are:

- Strengthen and support the local level in the risk management process;
- Encourage the local level to implement measures to reduce the vulnerability of the territory;
- Include the risk reduction factor in the planning process;
- Raise the awareness of citizens and governments in terms of reducing urban risks.

Apart from Lisbon, Amadora, Cascais, Funchal, Lisboa, Odivelas, Setúbal e Torres Vedras are also involve in this challenge.

Some good practices on Disaster Risk Reduction and Resilience may be:

- The use of the Information and Awareness Program for Disaster Risk Reduction in the Municipality of Amadora;
- To use management tools of prevention and planning such as:
 - Municipal Emergency Plans;
 - Early Intervention Plan;
- Use a contingency plan for heat waves and cold weather to reduce in most of the cases forest fires;
- Use of social networks (Facebook and YouTube for example)to reduce risks at local level;

1.6 Information sharing and data protection

In Portugal, the IPAD has to collect data from all ministries throughout the year in order to consolidate figures on disbursement for its own use, for Portuguese embassies and indeed for its partners. Having a more effective and systematic way to collate forward and current financial information would help Portugal to increase predictability and transparency. In addition, Portugal's official representations in its partner countries are the embassies. As such, they need reliable financial information to enable them to exercise appropriate oversight and accountability. It is vital that Portugal addresses this problem both at the central and local level.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The technological, industrial and urban development provides a better life style but also produce a series of risks and disasters. In Portugal, according to Decree-Law 173/2004 Crisis Management, the National System of Crisis Management (SNGC) aims to organize the existing resources to support the Prime Minister in the decision making process within the government action of managing crisis situations.

The SNGC consists of:

- The Crisis Cabinet;
- A support group;
- Implementing agencies.

The SNGC has the mission of decision making in crisis management situations. The Crisis Cabinet is chaired by the Prime Minister and is structured as follows:

- Minister of National Defence;
- Minister of Foreign Affairs;
- Minister of the Interior;
- Minister of Justice;
- The chief of the Armed Forces;
- The National Director of the Judicial Police;
- Other entities or people designated by the Prime Minister when the situation requires them.

The support group includes:

- The entities that make up the National Council for committees of Civil Protection planning;
- Advisers and technical experts in crisis management.

Its main objectives are:

- Monitor the development of the situation;
- Use the information provided by the competent authorities;
- Prepares studies and proposals ordered by the Crisis Cabinet or on its own initiative, on matters related to crisis management;
- Advise on matters relating to the European Union systems, the NATO and other international systems of crisis response.

In crisis management the National Authority of Civil Protection is one of the principal organisms of action. The National Authority of Civil Protection plans are approved at the different levels: the state, known as national level, the districts (regional level) and the local authorities. The role of the national authority of civil protection is to verify the drawing up of the plans and the updating of them.

The operation management system is formed by different levels, such as strategic, tactic and manoeuvring levels.

The strategic level develops different tasks:

- The determination of a proper strategy of acting.
- The preparation and updating of the strategic plan acting.

- The forecasting and planning of results

The tactical level manages how to achieve the operative activities, depending on the situation and according to all the strategies defined.

In crisis management, the ANPC has to:

- Contribute to the definition of national emergency planning policies, draw up general guidelines, promote the preparation of studies and emergency plans and provide technical support and give advice on their preparation by sectoral organizations;
- Ensure coordination of public and private services which should perform missions related to emergency planning, particularly in the areas of transport, energy, agriculture, fisheries and food, industry and communications.

The manoeuvring level determinates how all this strategies that have been defined should be developed in any situation according to the objectives defined.

2.2 General crisis (emergency, disaster) management law

Having a look at the vademecum¹⁸³¹, the different crisis management laws are described as follows:

- *At national level, the most important laws and regulations for civil protection are:*
 - *The General Law for Civil Protection (Law 27/2006) which main objectives are:*
 - *Protect people in a natural or technological disaster situation;*
 - *Prevent and alleviate the collective risk situations;*
 - *Continuous analysis of vulnerabilities;*
 - *Inform the citizens in crisis situations;*
 - *Planning emergency solutions (the provision of relief, assistance and evacuation; accommodation and supply; etc.);*
 - *Elaborate an inventory of the available and the most easily deployable resources at a local, regional and national level.*¹⁸³²
 - *The Law Decree establishing the Integrated System for Relief and Protection Operations (SIOPS) (Law-Decree 134/2006) that is the group of structures, rules and procedures to ensure that all the agents act in the operational plan, under a single command, without prejudice to their hierarchical and functional dependence;*¹⁸³³
 - *The National Civil Protection Authority Law (Law-Decree 75/2007) establishes that the ANPC has as a mission planning; coordinate and execute a civil protection policy to prevent several accidents and catastrophes; and protect and rescue people.*
- *At Ministerial level*
 - *The General Law for Civil Protection (Law 27/2006)*
 - *The Law Decree establishing the Integrated System for Relief and Protection Operations (SIOPS) (Law Decree 134/2006).*
- *Inter-ministerial cross-cutting coordination*
 - *The General Law for Civil Protection (Law 27/2006).*
- *At regional level*

¹⁸³¹ The Vademecum on Civil Protection, Portuguese branch. Accessed January 26, 2016 http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt.html/

¹⁸³² Decree-Law 134/2006 of 25 July the Integrated System for Relief and Protection Operations (SIOPS). Accessed February 22, 2016 <http://www.prociv.pt/Legislacao/Documents/DL%20134-%202006-SIOPS.pdf>

¹⁸³³ Law 27/2006 of the National Authority of Civil Protection basis. Accessed February 22, 2016 http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt.html/

- *The General Law for Civil Protection (Law 27/2006)*
- *The Law Decree establishing the Integrated System for Relief and Protection Operations (SIOPS) (Law Decree 134/2006).*
- *At local level*
 - *The Law defining the organisation of Civil Protection at local level (Law 65/2007).*
- *At international level*
 - *The General Law for Civil Protection (Law 27/2006).*¹⁸³⁴

2.3 Emergency rule

Crisis management is to solve a series of critical situations that arise suddenly or gradually. The critical situation that occurs slowly can be averted. According to the Environmental Hazard and Risk Assessment and Management (RISKAM) research group. There are some rules to follow:

- *To support and encourage efforts at national, regional and local level in order to prevent disaster, the readiness of those responsible for civil protection and rapid response in case of disaster;*
- *To contribute to public awareness in order to increase the level of self-protection of citizens;*
- *To establish a system for effective and rapid cooperation between national administrations for civil protection in case of mutual assistance is needed;*
- *To increase co-operation at the international level in the field of civil protection;*
- *To involve all organizational units and residents into crisis management tasks.*

Some of the rules related to monitoring, support and preparedness in emergency situations are:

- *Monitoring of situation in given system (i.e. a situation in an organizational unit in terms of comprehensive security);*
- *Support for detection of critical situations (evaluation methodology for data from monitoring);*
- *Preparedness to cope with critical situations, i.e. alternative scenarios based on national practices and development of implementation plans 248 (qualified plans are tackling feuds, confrontations and conflicts);*
- *Mastering the critical situation and start of recovery, i.e. the implementation of stabilization methods that are based on national habits (in each stage or nodal point, it is necessary to carry out risk assessments and evaluate their potential impacts, to ensure prevention of losses during response and recovery);*
- *Execution of reconstruction and triggering of other effective preventive measures to increase resiliency of organizational unit.*

Very important it is the co-ordination of all organizational units, which is the main task of public administration, the rules that have to be followed are:

- *Management and other employees of public administration and any other organizational unit should be aware that critical situations can affect the part that falls under their responsibility, and therefore, they need to be trained how to behave and what to do;*

¹⁸³⁴ The different crisis management laws. Accessed January 26, 2016
http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt.html/

- *The emergency of critical situations cannot be excluded, and therefore, any management has to count with them;*
- *Managers of organizational units need to realize that in case of critical situations in the area, it is not about question whether any organizational unit will be pulled into critical situations, but how soon and how strongly;*
- *Organizational unit managers are forced to know that every critical situation escalates when confusion or loss of control in organizational units occurs even for only short period of time;*
- *In dealing with critical situations, the response focuses only on the priorities and it is forced to reckon with the fact that:*
 - *It does not have enough information that is most needed;*
 - *There are events beyond the responsibility of organizational units;*
 - *There is a loss of control, endangering of vital interests, intensive monitoring from the outside, panic, disruption of regular decision making processes, managers shift of interest to short-term planning, decision making and activities.*
- *During the critical situations it is necessary to perform tasks for maintaining peace, such as facts gathering, avoiding the conflicts, ensuring the evaluations from the right experts, considering the legal consequences, protection of professional image, protection of vital interests, etc.;*
- *General recommendations for communicating with the public need to be focused on obtaining the public support and avoiding the confusion, ensuring the necessary activities, providing the right instruction at the right time for disabled people on what to do;*
- *A critical situation can be effectively managed only if the organizational unit is prepared for the worst.*¹⁸³⁵

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Crisis management is not only carried out within the state but also within each sophisticated organizational unit, municipality, organization and human being itself. Its main defined objective is the survival of people and creation of conditions that allow recovery and start of redevelopment.

Each organizational unit, in addition to goals that have been set up to reach its own objectives, must respect moral and ethical rules of society in place where it operates.

There are three levels of management:

- *Current management, strategic targeted safety management, which addresses security and sustainable development of an organizational unit understood as a system, i.e. for ensuring security and sustainable development of protected interests pursued by organizational unit. The main focus is on management of human activities and measures carried out by people, applied to that changes in given organizational unit caused by occurrence of adverse events;*
- *Emergency management, which is used in cases where serious problems occur and necessity exists to perform such activities and measures that would make loss, damage and harm to protected interests of the organizational units acceptable, when standard resources and forces of organizational unit are used;*

¹⁸³⁵ Emergency rules: Competent crisis plan for crisis management of municipalities and complex facilities. Accessed February 18, 2016 http://riskam.ul.pt/images/pdf/prochazkova_et_al_%202015.pdf

- *Crisis management, which is used in cases in which the organizational unit encountered a critical problem and it is necessary to perform activities and measures to limit loss, damage and harm to protected interests of the organizational units within and outside it to acceptable level;*¹⁸³⁶

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In Portugal, in the National Authority of Civil Protection system, every administrative level (local, regional, central) needs to have in place a preparedness plan for its focus area. In respect to the local and regional plans, the central government sets minimum criteria for their drafting.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

According to Article 2 of Lei n.º 71/98 (Law 71/98) of 3 November, volunteering is the set of actions of social and community interest, carried out selflessly by people on projects, programs and other forms of assistance to the service of individuals, families and communities, developed under a non-profit concept by public or private entities.

In order for an activity to be considered as volunteering, 4 characteristics must be met:

- Solidarity and altruism – related to the beneficiaries of the benevolent activities
- Freedom – interpreted as the autonomy and good will in order to be part of such activities
- Free of charge – interpreted as the main difference between a working relationship and a volunteering relationship
- Organization – under which such activities are going to be performed within an overall program or project

Law does not cover any activity which main philosophy is different to a disinterested goal as a volunteering activity. In other words, volunteering is out of scope when involving activities with any kind of relationship with relatives, friends, or neighbours, since altruism may be missing from this type of relationship.

In Portugal, volunteerism can be defined as a set of public interest activities carried out without an economic interest by individuals, within the framework of projects or programmes developed with a non-profit purpose by public entities, private organisations, or NGOs for the benefit of needy individuals, families or communities¹⁸³⁷. Starting from this definition, a legal framework has been established.

In addition to Section 2.2, there are also a series of regulations related to volunteerism:

- “Lei n.º 71/98 de 3 de Novembro , establishing the basic legal framework of volunteerism in Portugal” 1998. This is by far the most relevant law or regulation regarding volunteerism nowadays;

¹⁸³⁶ Competent crisis plan for crisis management of municipalities and complex facilities. Accessed February 18, 2016 http://riskam.ul.pt/images/pdf/prochazkova_et_al_%202015.pdf

¹⁸³⁷ Study on Volunteering in the European Union. Country Report Portugal. 2011

- “Regulamento do Programa Jovens Voluntários para a solidariedade nº745- G/96 de 18 de Dezembro” 1996;
- “Regulamento do Programa Lusíadas nº745 - H/96 de 18 Dezembro” 1996;
- Decreto-Lei n.º 40/89, de 12 de Fevereiro - Institutes the voluntary social insurance, a facultative regimen in the scope of the Social Security;
- “Decreto-Lei n.º 389/99 de 30 de Setembro , of the Ministry of Labour and Solidarity, developing the contents of the latter framework Law —Lei n.º 71/98” 1999;
- Resolução de Conselho de Ministros n.º 50/2000 (publicada no D.R., II série, n.º94, de 20 de Abril). This resolution defines the composition and the functioning of the National Council for the Promotion of Volunteering;
- Portaria n.º 87/2006, de 24 de Janeiro - Approves the Identification Card of the Volunteer.

Volunteering laws in Portugal also covers the volunteers’ rights, such as: issuing volunteer identification cards, insurance, and a program through which the voluntary activity is explained as a form of contract with the related organisations¹⁸³⁸.

2.7 Legal regulations for international engagements of first responders and crisis managers

The bilateral cooperation is based primarily on an agreement between two countries, which seek to regulate various aspects related to the joint development of the Civil Protection activities in various areas, such as:

- Training exchange;
- Exchange of experts;
- Holding meetings and information exchange of technical and scientific concepts
- Procedures for requesting and provision of mutual assistance in emergency situations, such as financial matters, border crossing, communications and contact points.

Portugal has bilateral agreements with Cape Verde, France, Morocco, Russia and Spain.

Bilateral agreement between Portugal and Cape Verde

Aid is still an important component of Cape Verde’s economy. Portugal is one of the biggest donors of Cape Verde. Cape Verde participated in the Budget Support Group (BSG). Portugal was the chair of the group in 2010.

Portugal has a long-standing relationship with the Government of Cape Verde and with the Cape Verdean people, both through its colonial occupation. In 2007 Portugal made a commitment to lend Cape Verde over USD 200 million. This can be drawn down as individual loans for specific projects.

Portugal has established conceptual and practical links between aid and non-aid activities in Cape Verde. While this means Portugal has to pay close attention to what it reports as Official

¹⁸³⁸ The Portuguese nonprofit sector in comparative perspective. Campos F., Raquel, et al. Universidade Catolica Portuguesa and Johns Hopkins University. 2005

Development Assistance (ODA) and ensure that ODA-related activities are directly focused on development and poverty reduction for example.

Bilateral agreement between Portugal and Spain

Relations with Spain are based on the protocol between the Kingdom of Spain and the Portuguese Republic of Mutual Technical Cooperation and Assistance of 9 March of 1992. This treatment defines the modalities of mutual assistance and also the assistance in the area near the border.

Portugal and Spain shared a common and frequent natural disaster, forest fires, one of the main reasons of the agreement between Portugal and Spain.

Bilateral agreement between Portugal and Spain

There are political; economic; and cultural, scientific and technique agreements between Portugal and France.

Portugal and France also cooperate in terms of national defence. The bilateral relations are based on a bilateral agreement signed on 30 July 1999. A meeting is held every 18 months at the headquarters of armées. Notre cooperation includes visits to authorities, regular political-military exchanges, targeted cooperation actions in different areas and the distribution of organizational models. It contributes to the maintenance of a favourable climate for the Portuguese and French defence interests in consideration of their proposals, particularly in organizations and security.

Bilateral agreement between Portugal and Morocco

Portugal and Morocco have signed 18 agreements such as environment; water treatment; marine and air transport; communication; and financial, economic and cultural cooperation.

3 Organisation

3.1 Organisational chart

The civil protection structure is organised at the national, regional and municipal levels.

The entire civil protection system integrates the ANPC, the Regional Services for Civil Protection in the Azores and Madeira (SRPC), the District Commands for Relief Operations (CDOS, one in each district) and the SMPC (one in each municipality).

The heads of the administrative civil protection units (district commanders) are nominated by the National Authority for Civil Protection.

The responsibility for the civil protection policy lies with the Government, which shall introduce, in the respective programme, the main orientations to be adapted or proposed in this field of intervention. The Prime Minister and the Ministry of the Interior are therefore responsible for directing the civil protection policy at national level.

At regional/district level, there are District Civil Protection Commissions (responsible for the political coordination and policy advice to the civil governor) and District Coordination Centres (operational coordination).

In each district there is also a District Command for Relief Operations, a branch of the Portuguese Civil Protection Authority. In the autonomous regions of the Azores and Madeira there are Regional Civil Protection Services, depending on the regional government.

At local level, there are Local Civil Protection Services depending on the mayor. Political and operational coordination is assured by the municipal civil protection organisations. The mayor, in the exercise of his functions as the responsible entity of the civil protection policy in the municipality, is responsible for activating, during the occurrence of a serious accident or catastrophe, the adequate civil protection actions aimed at prevention, aid, assistance and rehabilitation for each case.

Soon after a major disaster cannot be solved either by the means assigned to the municipality or to the district, where the disaster takes place, the ANPC activates the National Coordination Centre to coordinate and control the relief operations and logistics support at national level.

A National Command for Relief Operations operates 24 hours a day in the ANPC to control and manage the current situation.

Operational organizations act under civil protection command according to the rules of the SIOPS. Decisions are made by the National Coordination Centre.

The institutional coordination of SIOPS is ensured at national level and at the level of each district, the Operational Coordination Centres (CCO), which include representatives of entities whose intervention is justified on the basis of each occurrence in concrete.

The CCO is responsible for managing the operational involvement of each force or service for relief operations to trigger.

The responsibilities of CCO are:

- Ensure coordination of resources and logistical support of relief operations, and emergency assistance undertaken by all members of SIOPS organizations;
- Inform permanently its political authority of all relevant facts that may lead to problems or bottlenecks within the operational response;

- Ensure the management and monitoring all instances, ensuring an appropriate response under the SIOPS.

According to a national response, the National Operational Coordination Centre (CCON) makes sure that all the entities and national institutions which main activity is based on protection and rescue operation, emergency and assistance of a serious accident or catastrophe hang together.

The main representatives of the CCON are:

- National Authority of Civil Protection
- Republican National Guard
- Public Security Police
- National Institute of Health Emergency
- Institute of Meteorology
- A branch of the armed forces that is dedicated to protection and rescue operations and emergency assistance of human beings and material resources.

The CCON is coordinated by the National Authority of Civil Protection and can be represented by the operative commander of the National Authority of Civil Protection.

Its responsibilities are:

- Integrating, evaluating, and monitoring the whole operative activity in a disaster situation or a serious accident.
- To guarantee a continuous flow of strategic information to the Districts specific civil protection department in a case of a disaster situation or a serious accident.
- Disseminating information and notices to the people, entities and institutions.
- To evaluate the situation and propose to the National Civil Protection Commission a set of requests for assistance to other countries.
- To guarantee that all the operation methods in a case of alert or catastrophe are achieved.

In terms of a district response, the District Operative Coordination Centres (CCOD) ensure that all the entities and district level institutions essential in protection and rescue operations hang together.

The main representatives of the CCOD are:

- National Authority of Civil Protection
- Republican National Guard
- Public Security Police

The CCOD are coordinated by the operative district commanders of the National Authority of Civil Protection.

Responsibilities of CCOD are:

- Integrating, evaluating, and monitoring the whole operative activity in a disaster situation or a serious accident.
- Disseminating information and notices to the people, entities and institutions.
- To evaluate the situation and propose to the Civil Governor the district methods of operation under the supervision of the National Government.

According to the nature of the disaster, specific organizations may be called to act under civil protection authority (e.g. the Water Institute, the Forest Services, etc.).

Figure 1 gives an outline of the organisational structure of the disaster relief in Portugal.



Figure 9: Organisational Chart of the National Authority for Civil Protection in Portugal¹⁸³⁹

Figure 3 gives an outline of the organisational structure of civil protection in Portugal.

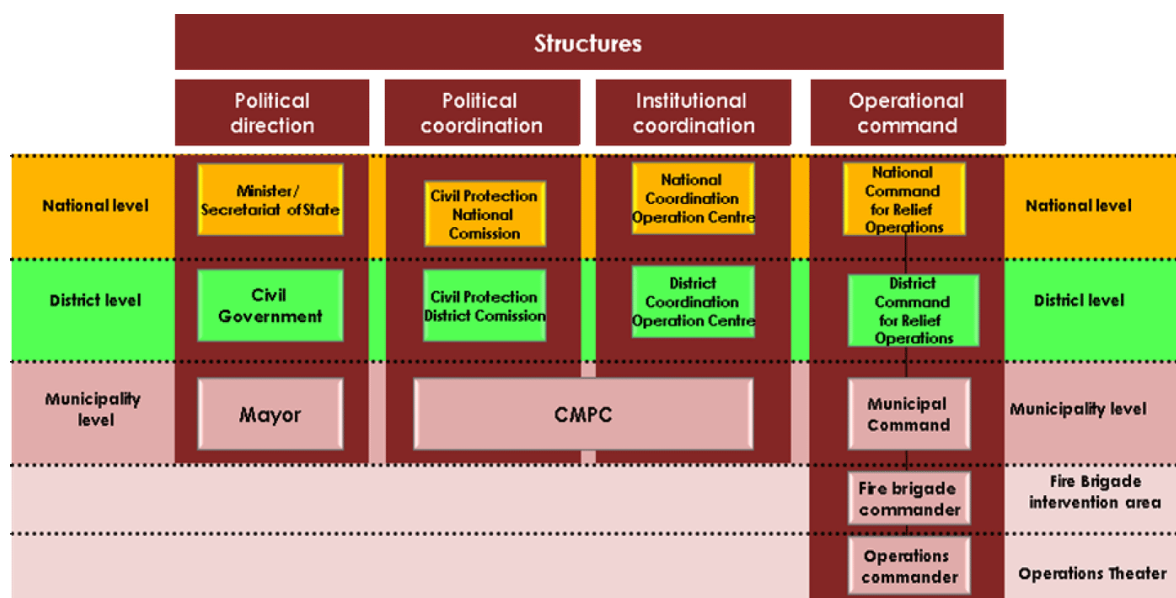


Figure 10: Structure of the National Authority for Civil Protection in Portugal¹⁸⁴⁰

Another actor in the Crisis Management is The Força Especial de Bombeiros Canarinhos (Special Force Fire Canarinhos, FEBC). The FEBC is a particular force of the civil protection; it has its own structure and its own command chain. The FEBC is a part of the National Authority of Civil Protection and it was created by Article 19 of Decree-Law 247/2007 of 27 June.

The FEBC has a series of tasks and values, a structures, and different branches. They are named in the following sections.

The FEBC has a series of tasks:

- *Reply with high degree of readiness, the requests of protection and relief, prevent and combat fires scenarios, serious accidents and disasters anywhere in the domestic or overseas territory and in other part of the missions Civil protection;*

¹⁸³⁹ Organisational Chart of the National Authority for Civil Protection in Portugal. Accessed January 26, 2016 http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt-1.html#orga/

¹⁸⁴⁰ Structure of the National Authority for Civil Protection in Portugal. Accessed January 26, 2016 http://ec.europa.eu/echo/files/civil_protection/vademecum/pt/2-pt-1.html#orga/

- *Provide specialized training in values that can be accredited by the National School of Fire (Escola Nacional de Bombeiros, ENB).*

The values of FEBC are:

- *Permanent disposal to any Mission;*
- *Quality and efficiency in any operation;*
- *Professional ethic;*
- *Good interpersonal abilities.*¹⁸⁴¹

Nowadays FEBC is formed by:

- *Three companies, seven subunits and a total of two hundred and fifty professional in fighting fire operations.*
- *A management unit and logistic support.*
- *A General Staff that is a body of support and advice to the Commander of the FEB.*

The FEBC has a series of departments:

- *Recovery-Savers group (Grupo de Recuperadores – Salvadores, RS): The Recovery-Savers (RS) are part of a specific group in the direct dependence of the Commander of the FEB, distributed by Helicopter Base Permanent Service (BHSP), defined superiorly. The Recovery-Savers Group competes performing search and rescue missions in aquatic and terrestrial environment. The main missions of this group are:*
 - *Reply with high degree of readiness, to requests for search and rescue that require the intervention of an air means with the necessary qualifications;*
 - *Participate in prevention actions in the field of civil protection;*
 - *Participate in other actions for which are technically prepared and included in the specific purposes of the missions assigned to Special Force Fire (FEB).*
- *Group of Mountain Rescue, the Rescue group in Mountain carries out its mission in the area defined in PONSE (National Plan of Operations of the Serra da Estrela).*
- *The Brigade of Logistics Support of FEB was established to assist and support the logistical tasks within the cell CNOS Logistics.*
- *Group on International Response, the International Response Group performs in international missions of protection and relief or humanitarian aid, and may intervene integrated in joint or combined forces, together with other civil protection agents.*
- *Recognition and Situation Assessment Team (ERAS), the ERAS are characterized by their great skill and expertise, guaranteeing permanent interconnection, and their main objective to provide the CNOS or CDOS, according to the level of activation, with immediate and essential information to the decision-making process.*¹⁸⁴²

¹⁸⁴¹Tasks and values of the Special Force of Fire Canarinhos. Accessed January 26, 2016 <http://www.prociv.pt/FEBombeiros/Pages/Apresentacao.aspx/>

¹⁸⁴²Different branches of the Special Force of Fire Canarinhos in Portugal. Accessed January 26, 2016 <http://www.prociv.pt/FEBombeiros/Pages/Valencias.aspx/>

3.2 Organisational cooperation

In Figure 2 and 3 in Section **¡Error! No se encuentra el origen de la referencia.**, it is possible to understand all the different cooperation levels from political, institutional and operational activities. There is also an established structure depending on the scope in which these activities take place.

There is Cross-border Territorial Cooperation between Spain and Portugal. The European Commission approved on 25 October 2007 a European territorial cooperation programme for Cross-border cooperation between Spain and Portugal for the period 2007-2013. The overall objective of the programme is to develop further and broaden the common border areas of both countries within the priorities set by the new European territorial cooperation objective. This marks a substantial shift in the overall programme objectives, away from previous programmes, that is geared chiefly towards improving connectivity and basic infrastructures in the border areas and towards a new approach aimed at improving competitiveness, promoting employment and enhancing socio-economic and institutional integration in the border regions.

The trend established through successive programmes has led to a new type of cross-border cooperation in the current period that focuses on:

- Reinforcement of the immaterial component of the interventions;
- Widening of the scope of stakeholders in the cooperation process;
- More intense cooperation in all phases of the development of interventions (design, development and operation, joint management);
- Strengthening of joint cooperation structures.

The Southwest European (Sudoeste Europeo, SUDOE) Cooperation Programme is developed by taking as a basis the 2020 Europe Strategy for the Operational Programme's contribution to the Union strategy for smart, sustainable and inclusive growth and the three growth models (smart, sustainable and inclusive) that are the guiding principles of the 2014-2020 programme. In its turn the Programme has accumulated the experience of the four previous generations of programmes in its knowledge of the territory, its players, and the understanding of the development modes of its projects.

The strategy of the 2014-2020 SUDOE Programme is developed initially from a group of main elements, which will be developed later throughout this section and the remaining ones of the Programme:

- Territorial (socioeconomic) diagnosis of the eligible area to establish the challenges and prior priorities of the space.
- Revision of the complementarity of actions with the regional operating programmes in each of the NUTS¹⁸⁴³ 2 regions, of the national multiregional programmes, and of the transnational and cross-border cooperation programmes that partially operate in the eligible territory.
- The intervention proposals and the possibility of carrying out actions linked to the Partnership Agreements of the four participating member states.
- The capitalisation of the results of the previous programming periods, in particular of the 2007-2013 period.
- The participative process established with the agents of the territory, in particular of the surveys carried out in 2012 and 2013 (on the type of potential actions and the systems for

¹⁸⁴³ NUTS (Nomenclature des Unités Territoriales Statistiques) regions included in the cooperation programme

initiating them) by the managing authority and the national authorities in their respective territories.

- The establishing of the logical framework of intervention as a conclusion of the above points and the result of the agreements among the participating states, taking as a basis for development the analysis of the feasibility of the actions considered optimum for their initiation in the Programme.

In terms of accessibility and transport, the SUDOE space is generally satisfactory, although it is still necessary to encourage intermodal connections (the intermodality of transport systems) and to improve land communications between frontier zones of Spain and Portugal. The multimodal accessibility index of the territories of the SUDOE area is lower than the EU average apart from certain coastal areas of the Mediterranean and the Atlantic. These multimodal access limitations are more acute in particular in inland border areas of Spain and Portugal, especially in the Alto Tras-os-Montes/Zamora and Beira Interior Sul/Salamanca frontier areas and in the Pyrenees. In general the SUDOE regions have good density indexes for infrastructures and overland communication, such as main roads and major railway lines. They also enjoy good connections with the main commercial ports on both the Mediterranean and the Atlantic coasts, which are now affected by regional policies and programmes. Mobility still remains difficult in certain areas, above all in the northeast frontier zones between Portugal and Spain and between Spain and France, which is the result of the scarcity of crossing points or the complexity of the geography of the territory.

Since the ANPC merged with CNPCE, a “back to their origin country” plan was developed. With this plan people who live in other countries could be evacuated in the fastest way, in this specific case, to Portugal. This plan is an instrument that defines the structure and the steps that has to be followed to create the best returning conditions to Portuguese people who live in another country with unnatural situations.

This plan develops in three steps:

- Manage every operation method in the residence country and coordinate how people are transported back to Portugal. This action is coordinated by the Ministry of Foreign Affairs. Ministry of Solidarity and Social Security
- The second step covers actions on arrival in Portugal and the activities arising from host. This action is coordinated by the Ministry of Solidarity and Social Security;
- The third step comprises support actions and supervision of citizens to their integration into society, being coordinated in Portugal by the District Social Security Centres, and in the islands by the regional governments.

This plan is driven by the prime minister, by his own decision or proposal of the Executive Council, which is responsible for the overall supervision of the unit plan. This Committee is chaired by the Secretary of State for the Presidency of the Council of Ministers and the Vice President of the ANPC.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The Integrated System for Relief and Protection Operations (SIOPS) defines a set of rules and procedures, which guarantee that civil protection agents act, at the operational level, in a coordinated way and under a unique command.

Operational organisations act under civil protection command according to the rules of the SIOPS and decisions are taken by the National Coordination Centre.

Specific emergency plans may also exist as instruments of planning, organization, coordination and operational command of Integrated Device Protection and Relief Operations (DIOPS). For example:

- Fight against forest fires DECIF - Dispositivo Especial de Combate a Incêndios Florestais
- Integrated Protocol for Aircraft Disaster Response DIRACAERO - Dispositivo Integrado de Resposta Acidentes com Aeronaves
- Integrated Operational Protocol for Nuclear, Radiological, Biological and Chemical, NRBQ - Dispositivo Integrado de Operações-Nuclear, Radiológico, Biológico e Químico
- Integrated Protocol for Relief and Protection Operations DIOPS - Dispositivo Integrado das Operações de Protecção e Socorro

The Decree-Law No. 73/2012, of 26 March, transferred to the National Civil Protection Authority tasks of the National Council for Civil Emergency Planning, and Decree-Law No. 163/2014 of 31 October, attributed to the ANPC the task of ensuring the planning and coordination of national needs in emergency civil planning area in order to address situations of crisis or war. This was a substantial strengthening of the action framework of the ANPC, which now encompass situations of crisis and war in addition to serious accidents and catastrophes.

The ANPC set up the pillars of the concept of civil emergency planning, translated basically in collecting, analysing and sharing information intended to provide the effective use of the capacities and civilian resources in support of military structures.

This development would materialize in the definition of five specific areas of action in the field of civil emergency planning:

- Civil support for collective defence operations;
- Support for crisis management operations;
- Support to national authorities in emergency management;
- Support to national authorities in protecting against the weapons of mass destruction;
- Cooperation with partner countries in the preparation and response to emergencies.

4.2 Operations planning

In 1984 the National Council for Civil Emergency Planning (CNPCE) started operating in dependence of the Prime Minister.

Later, in 1991, it was legally enshrined the existence of the National System of Civil Emergency Planning, which encompassed both the CNPCE and a set of Emergency Planning Committees of

various sectors of activity. The civil emergency planning thus became understood in Portugal as the activity that is intended to coordinate non-military components and capabilities of national defence and civil support to the Armed Forces as well as to organize and prepare the various strategic sectors of the Nation in situations of crisis or war, in order to contribute to the guarantee of freedom of political and governmental action, as well as for the safety and well-being of the population.

With the extinction of the CNPCE and the absorption of its powers by the ANPC began a new cycle. Since April 2012, the ANPC took responsibility to ensure a national representation in the Civil Planning Committee of Emergency of NATO also taking the mission at national level and in partnership with organizations from the fields of industry, energy, transport, communications, agriculture, environment, health and cyberspace, to define, update and implement the emergency civil planning policies.

Since the ANPC merged with CNPCE a “back to their origin country” plan was developed, with this plan people who live in other countries could be evacuated in the fastest way, in this specific case, to Portugal. This plan is an instrument that defines the structure and the steps that has to be followed to create the best returning conditions to Portuguese people who live in another country with unnatural situations.

4.3 Logistics support in crises

In the context of an emergency or crisis, the protection civil agents provide the required logistic support according to the severity level and the nature of the incident. The most relevant civil protection agents in Portugal are listed below:

- Recovery-Savers group (Grupo de Recuperadores – Salvadores, RS);
- Group of Mountain Rescue;
- The Brigade of Logistics Support of FEB;
- Group on International Response;
- Team Recognition and Situation Assessment (ERAS);
- The Lifesaving brigade;
- The Operational Command teams of National Reserve;
- Analysis and Use of Fire Team (EAUF);
- The operators of emergency telecommunications (OTE);
- The fire departments,
- Security forces;
- The Armed Forces;
- The INEM (National Institute of Medical Emergency) and other health services;
- The forest firefighters.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Risks and crises cannot be managed without communication because, as research shows, communication is the most powerful influence on people’s risk decision-making and behaviour.

Increasingly, communications is being recognized as essential to enabling people and organizations, including governments, to manage risks and crises effectively.

Portugal is a member of the International Association of Risk and Crisis Communication (IARCC). The International Association of Risk and Crisis Communication (IARCC) is a non-governmental, independent and international network of nationally organised associations with headquarters in Geneva, Switzerland. Today, five national associations are member associations of the IARCC. They are registered in Austria, France, Portugal, Switzerland and the United Kingdom.

The objectives of the IARCC are the furthering of responsible and professional communication and its recognition as an important tool to reduce risks, prevent crisis and catastrophe scenarios or reduce the harm they cause.

As a recent example, ARCC Portugal has developed a risk communication campaign proposal for URBSIS, a project for “Assessing Vulnerability and Managing Earthquake Risk at Urban Scale” which main goal is the adoption of measures to reduce seismic risk, promoting research in this scope and encouraging a national plan to reduce seismic vulnerability. Those communication proposals are:

- Risk communication audit: Provides the techniques to prepare people through communication for a natural hazard.
- Risk and crisis communication strategy and plans: ARCC Portugal proposes to accompany the actualisation of risk and crisis communication strategies and the drafting of communication plans in preparation of seismic risks and catastrophes.

The objectives of the risk communication project are:

- Ensure a good cooperation with population;
- Make sure that the contents of the audit report of the scientific team are well understood and that practical actions are taken in accordance with the report findings;
- Improve the risk and crisis communication strategy and plan of earthquake catastrophes. Enhance risk awareness, preparedness and crisis management capabilities.

The Portuguese alert-level status can be monitored in real time for many natural menaces. The ANPC, in cooperation with national organizations, provides information on:

- Forest fires;
- Daily risk of forestall fire happening;
- UV radiation index;
- Heat wave alerts;
- Weather alerts;
- Civil Protection Alerts.

In Portugal, the ANPC edited the collection of 21 booklets called Prevention and Protection directed to the general public and children and youth seeking knowledge and adoption of prevention and self-protection against a range of risks.

16 audio spots were produced as Prevention and Self-protection tools through partnership with the Imaging Technique School of Image and Communication (ETIC) in order to multiply the information tools provided by ANPC.

The ANPC produced two cards (one for adults and another for children), which let people know all the booklets of the ANPC and the prevention and self-protection measures related to collective risks of natural and technological origin.

The ANPC also created PROCIV which is a newsletter that monthly provides news about national and international actions, agents, technical dossiers, key legislation and a schedule of events within the civil protection.

5 Capabilities

5.1 Human resources

The different local and regional government have their own resources and means to tackle emergency situation.

The Operations Management System (SGO) is a form of operational organization that develops a modular configuration, according to the importance and type of occurrence, applying whenever a force of any Civil Protection Agent (CPA) or institution with special duty of cooperation is driven to an instance in which the head of the first team to reach the site immediately assumes the command of the operation - Relief Operations Commander (COS) - and we build an evolutionary command and control system appropriate to the current situation.

The National Relief Operations Command (CNOS) consists of the national operational commander and three deputies and comprises the cell planning, operations, and information and logistics cell.

The Psychosocial Support Teams (EAPS) are part of the operational response of the National Civil Protection Authority. The coordination of these teams is carried out by the Security Centre and Health (NSS), Unit Support of Volunteers (UAV) that integrates the National Fire Department (DNB).

The Special Force Fire Canarinhos (FEBC) has its own structure and its own command chain.

The Special Force of Fire is assumed as a professional fire department unit able to intervene at any stage in the field of protection and assistance, whether in the country or outside the country.

The establishment of this Force was only possible with the indispensable assistance of the fire department Humanitarian Associations who provided their firefighters and highlighted them according to the protocol established with the ANPC.

In the initial phase of operation, the Special Force of Fire was primarily used in the initial control on wildfires by air or by land. Increasingly, teams and groups began specialized training in the remaining civil protection valences.

According to the Special Force of Fire report activity, in July 1, 2014 (at the beginning of Charlie's Phase DECIF), the FEB had a total of 269 active members, distributed by function as follows in table 2.

Groups	Functions	Members
Command	Commander	1
	2 nd Commander	1
	Assistant	3
	Company Commander	2
Territorial	Chief of group	8
	Brigade chief	20
	Team chief	30

	Firefighters	190
Rescuers and savers	Technical checker	2
	Assistant technical checker	2
	Rescuer-saver	8
	Total	269

Table 9: Active members, distributed by function¹⁸⁴⁴

The FEB currently consists of 3 companies and 7 subunits or groups and currently has an overall effective of 259 firefighters.

The FEB currently has 57 members accredited by the National Fire School (ENB), to provide training in different areas of knowledge that make up the training offer of ENB to the universe of Fire, according to Table 3.

Training area	Accredited trainers
First Aid Techniques	3
Technical Rescue and extrication	14
Head of Rescue Team	8
Driving Off Road	2
Rescue techniques in Grand Angle	4
Defensive Driving	1
Fighting urban and industrial fires	5
Fighting Forest Fires	12
Lifeguard	1
Relief vessels driving	1
Hazardous materials	2
Central Operator	2
Techniques Shoring	2

Table 3: Training in different areas of knowledge¹⁸⁴⁵

¹⁸⁴⁴ The Special Force of Fire activity report “Active members, distributed by function” in page 32. Accessed January 26, 2016
<http://www.prociv.pt/FEBombeiros/Documents/Relat%C3%B3rio de Atividades FEB 2014.pdf/>

¹⁸⁴⁵ The Special Force of Fire activity report “Training in different areas of knowledge” in page 37. Accessed January 26, 2016
<http://www.prociv.pt/FEBombeiros/Documents/Relat%C3%B3rio de Atividades FEB 2014.pdf/>

5.2 Materiel (non-financial) resources

The FEB has currently 57 operational vehicles. It includes a set of equipment for intervention in different scenarios outside the scope of fighting forest fires, according to Table 4.

Tools	Amount
Lighting balloons	9
Relief vessels	2 ¹⁸⁴⁶
Diving equipment	10
Rescue and extrication equipment	12
Rescue equipment in Grand Angle	1
Rescue equipment in Mountain	20
High Capacity Generator	2
Lifeguard	1
Average capacity generator	6
Inflatable tents	7

Table 10: Equipment for intervention in different scenarios¹⁸⁴⁷

The ANPC has special vehicles properly equipped with telecommunication means and systems to ensure the operation in an emergency situation. Since 2005, the Civil Protection has been making a great effort to extend and renew the fleet of vehicles, at district level:

- Light vehicle fire fighting
- Forest fire fighting vehicle
- Urban vehicle fire fighting
- Urban tactical tank vehicle
- Rural tactical tank vehicle
- Rescue vehicle and tactical assistance
- Rescue vehicle and special assistance
- Tactical Command Vehicle
- Rescue Ambulance.

Territorial Groups of the FEB are located in seven permanent bases, installed in each of the districts where it operates.

The Recovery Group - Rescuers of the FEB operates from 2 Helicopter bases that provide a Permanent Service (BHSP).

¹⁸⁴⁶ A vessel under an agreement of transfer of use between ANPC and the Administration of the Hydrographic Region of Alentejo

¹⁸⁴⁷ The Special Force of Fire activity report "Training in different areas of knowledge" in page 45. Accessed January 26, 2016
http://www.prociv.pt/FEBombeiros/Documents/Relat%C3%B3rio_de_Atividades_FEB_2014.pdf/

The Portuguese Red Cross shall perform, in cooperation with the other agents and in accordance with its own constitution, civil protection functions in the areas of intervention, support, relief and health and social care.

The following entities play special roles as civil protection agents:

- Humanitarian associations of volunteer firefighters;
- Security services;
- National Institute of Legal Medicine and Forensic Sciences;
- Social security institutions;
- Institutions with rescue purposes and solidarity;
- Bodies responsible for forests, nature conservation, industry and energy, transport, communications, water resources and environment;
- Security services and private help public and private companies, ports and airports.

The Portuguese Red Cross aims to help vulnerable people, whoever they are and wherever they are, in order to protect their lives.

This institution also aims to prepare the community to respond to emergency situations of natural or human origin. And when the emergency ends, providing the necessary support for the recovery and restoration of life of those affected.

Internationally, the Portuguese Red Cross is involved in several development programs, directly or as part of the International Federation of Red Cross and Red Crescent.

Humanitarian aid pays special attention to the most immediate needs of people in emergency situations: rescue, shelter, clean water and sanitation, food aid and nutritional support, health and psychological support.

Currently, humanitarian aid has become an increasingly necessary task. Situations where this type of aid is needed, emergency has increased in number and complexity.

The Portuguese Red Cross focuses on strengthening its ties with the National Societies of Portuguese Language, to create a network of cooperation between countries with a common history, culture and language.

In July 2003 the Forum of National Red Cross Societies of Portuguese Language (SNLP Forum) was created, after more than a decade of informal meetings. The main objective of this group is to strengthen cooperation among its members, particularly in the areas of:

- Health;
- Preparation for intervention in disasters;
- Training;
- Migration.

5.3 Training

The SNPC is a body for the development of plans, policies and coordination and control of emergency response. There are no organic disaster response units or schools for civil protection within its organisation. The training of civil protection agents lies with the commands/directions that have schools and training centres for such purpose.

Several civil protection exercises are conducted every year, but there is no national exercise planning directive. These exercises take place at different levels: local, regional and national, and can assume different natures: command post or live exercises. Some examples of exercise are the following:

- The first civil protection international exercise took place in the Lisbon Urban Area on May 2009 and aimed at testing the operational procedures foreseen in the Lisbon Emergency Plan for Earthquakes.
- The “Terra Treme”¹⁸⁴⁸ is a preparation exercise and self-protection for the seismic risk during one minute, in which every citizen could participate individually or in groups. This is a training exercise organized by ANPC.

The Civil Protection is a system with multiple agents, valences and performance tools. A citizen aware of the risks and the contribution it can make to avoid or mitigate their consequences is, in principle, a civilian protection active agent, playing a key role in the system. It is already common to say that the Civil Protection starts and ends in each person, if people prepare themselves to be both their agents and their beneficiaries. In education and citizenship, the ANPC strategy is based on the following assumptions:

- *Use of resources and knowledge at the closest level to the citizen;*
- *Preference for positive approaches (no risk is greater than our ability to manage) at the expense of negative (catastrophes are inevitable);*
- *Identification of children and youth as a privileged public but not exclusive;*
- *Importance of non-formal and informal education as a supplementary resource;*
- *Recognition of the state's limitations, supplementing them with collaborative partnerships;*
- *Use of Information and Communication Technologies to achieve its objectives in a better way;*
- *Setting targets, commensurate with the means available.* ¹⁸⁴⁹

The knowledge of the risks, safety procedures and appropriate behaviour is not only responsibility of the state and authorities, but also a duty of citizenship.

In addition to the residents in high risk zones, more familiar with local constraints and the precautions to be taken, all citizens must be aware of the main risks and respective collective self-protection measures in the event of a serious accident or catastrophe.

In Portugal, the National Authority of Civil Protection also provides a series of manuals to teach people how to act in different disaster or catastrophe situations, in this case, at home, at school (providing different manuals to teachers), at the workplace and in opened air places.

The family emergency plan is drawn up in order to prevent accidents that could endanger family members and / or their properties.

Citizens should know the hazards serious accidents or disasters that occur in their homes and in the workplace usually occur by surprise.

The Family Emergency Plan should take into account the conduct of an inspection of the entire house looking for potential risks by performing relatively simple actions such as:

- *Fix the shelves to the walls;*
- *Place heavier objects or bulk on the floor or on the lower shelves;*
- *Do not put pots or window boxes on the windowsills or balconies;*
- *Identify sites that offer greater protection in the event of collapse: under beams, tables, doorways;*

¹⁸⁴⁸ <http://aterratreme.pt>

¹⁸⁴⁹ The ANPC strategy in education and citizenship. Accessed January 26, 2016 <http://www.prociv.pt/educid/Paginas/Educa%C3%A7%C3%A3oCidadania.aspx/>

- *Make periodic or general cleaning to the typically underutilized locations or difficult to access (attics, storage rooms, archives, etc.) and not to allow the accumulation of dust or waste (potential fuels);*

As survival articles people should have:

- *Flashlight and a battery operated radio (with extra batteries), clothing (blanket, change of clothes), water and packaged food, in sufficient quantities to respond to family needs for a minimum of 3 days.*

These are some general procedures in case of serious accident or catastrophe being at home:

- *Check for injuries and give first aid;*
- *Ask for help if there are serious injuries;*
- *Turn the radio on and follow the instructions given;*
- *Check for severe damage at home and make sure they do not represent a risk of collapse;*
- *Use battery-powered flashlights and do not turn on the power if you suspect the possibility of gas leakage;*¹⁸⁵⁰

At the workplace the existence of an emergency plan is very important for several reasons. First, endows the company with an effective level of security, identifying the risks to which workers are exposed in the workplace, and the measures of prevention and protection.

With an emergency plan properly tested by all, there is an interaction from the base to the summit, for everyone to participate in preparing the plan. So with an approved emergency plan, the company can recover more easily from an emergency situation.

The company has an obligation to ensure the safety of its employees and providing an effective emergency plan is one of the elements for the implementation of a safety culture.

Nowadays, the outdoor spaces are increasingly visited by people looking for contact with nature, particularly through sport activities.

These spaces could be form by unstable ground or could be on high altitude, for example, and a series of meteorological phenomena can evolve rapidly and sometimes violently and the ignorance of the all these factors can have serious consequences for people health and security.

Many of the outdoor sports require a minimum of technical and training and should not hesitate to resort to training centres and specialized schools. A monitor or professional guide can be very useful for the most adventurous expeditions. With a good education will save effort and increase your safety.

Safety depends on behaviours based fundamentally on the information, preparation and prudence.

In most cases, the walks do not require great learning or special techniques and can be practiced by people of all ages. However, some cases require more preparation and experience.

5.4 Niche capabilities

In terms of communication there is an organisation called Telecoms Sans Frontiers (TSF) that intervened in a forest fire in Portugal in 2003, and provided the satellite lines for communication. The mission of TSF is to provide telecommunications in places where local infrastructure are destroyed, are insufficient or non-existent.

¹⁸⁵⁰The Family Emergency Plan according to the National Authority of Civil Protection. Accessed January 26, 2016 <http://www.prociv.pt/educid/gestos/Paginas/PlanoFamiliarEmergencia.aspx/>

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Driving Innovation in Crisis Management for **European Resilience**

ROMANIA

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Valeri Ratchev, Todor Tagarev, Zlatogor Minchev, Vesselin Petkov)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ATOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Romania is highly vulnerable to catastrophic natural disasters. It is situated in a seismically active region and has a history of devastating and deadly earthquakes, including the one with strongest impact, in Vrancea in 1977. Furthermore, the Bucharest area has experienced a number of tremors of varying intensities, and the probability that a severe and damaging earthquake will occur is high. Romania is also at risk by other natural and technological hazards. More specifically, the 2010 floods revealed weaknesses of the civil protection system and triggered a process of improvement. Of the former group, floods, drought and heat/cold waves have been experienced frequently, while the most affecting example of a man-made disaster has been the accident at the Baia Mare gold processing plant, where, in 2000, 100 000 cubic meters of toxic wastewater spilled out and flooded into the Danube River, affecting Romania, Hungary, Ukraine, Serbia, and Bulgaria.

The Romanian crisis management concept views civil protection as a public policy issue, and as a civil operation during which the military could provide support with both assets and people. Crisis management does not rely on a centralised structure but is a result of the interaction of parallel architectures. The latter involve bodies and agencies dealing with particular risks, while the crisis management system-of-systems implements an all-hazard approach. The most significant developments within the crisis management domain took place in 2004, as well as after the 2007 accession to the European Union.



Coat of the General Inspectorate for Emergency Situations of Romania

The National Emergency Management System (NEMS) is a nationally owned mechanism of multiple stakeholders, which provides coordination and response in case of emergencies, and serves as an advocate for prevention and disaster risk reduction at different levels. It is organised at four levels (national/governmental, ministerial, county and local), with a particular coordination and communication role for the national-level authorities. The system is led by the Prime Minister, supported by the National Committee for Emergency Situations, and the Minister of Administration and Interior designated as a chief executive. The main executive administrative body is the General Inspectorate for Emergency Situations (GIES), which coordinates plans and operational activities in cases of natural and man-made emergency situations. Specific plans are prepared at all administrative levels. Funding is provided through the state and local budgets though they are used mostly for post-disaster recovery and less for preventive measures.

The role of the private sector in the civil security system is limited, while NGOs cooperate closely with the state institutions, mostly in the fields of education and training. The number of organised volunteers is about 130 000. Regulations require that everyone be prepared to take care of himself in the immediate aftermath of major disasters. Every family and company should develop its own emergency plan, stock its own emergency survival kit, and ensure that each family member or a company employee is familiarised with emergency procedures and can take precautions to protect their personal safety. However, in general, the society is not well organised at a community level and expectations that disaster management is a state responsibility are shared widely.

After Romania's EU accession in 2007, the country improved its cooperation with international actors and increased its efforts to make the crisis management system coherent with international (particularly the EU) context. Romania has increased its engagement in the work of committees and working groups dealing with the EU's civil protection. Romania has activated the EU's Monitoring and Information Centre (MIC)¹⁸⁵¹ several times and contributed to several MIC-coordinated interventions providing support to Greece, Georgia, Hungary, Moldova and Turkey. Bilateral agreements or protocols are signed with some of the Romania's neighbours (Bulgaria, Hungary, and Moldova), as well with other European (Czech, Denmark, France, the Netherlands, and Turkey) and non-European countries (Azerbaijan and the USA –with FEMA and USTDA).

The Romanian capacity for emergency response includes several niche capabilities: pyrotechnical capabilities for drainage, controlled breaches, and detonation, for water purification and transportation and for marine de-pollution. Military cargo aircraft are also available in cases of emergencies at home and abroad (C-27J Spartan – 6, C-130 Hercules – 3, and An-26 Curl – 4).

¹⁸⁵¹

MIC has been renamed to Emergency Response Coordination Centre (ERCC).

Table of Contents

R O M A N I A Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1334
Overview	1335
Table of Contents	1337
List of Figures	1339
List of Tables.....	1339
List of Abbreviations.....	1340
1 Policy	1341
1.1 Risk Assessment.....	1341
1.2 Policy and Governance	1352
1.2.1 Strategy scope and focus.....	1354
1.2.2 Monitoring and analytical support to policy making; R&D	1357
1.2.3 Policy for Prevention	1361
1.2.4 Policy for Preparedness.....	1361
1.2.5 Policy for Response	1362
1.2.6 Policy for Relief and Recovery	1362
1.3 Financing.....	1363
1.3.1 Investing in preparedness	1363
1.3.2 Investing in consequence management.....	1365
1.4 Policy review, Evaluation & Organisational Learning	1367
1.4.1 Post-Disaster Assessment.....	1367
1.4.2 Departmental lessons learned systems.....	1367
1.4.3 Centralised (national) lessons learned system.....	1367
1.4.4 International exchange for lessons learned	1368
1.4.5 Regular policy reviews.....	1368
1.5 Resilience	1370
1.6 Information sharing and data protection	1371
2 Legislation	1373
2.1 Crisis (emergency, disaster) management concept.....	1373
2.2 General crisis (emergency, disaster) management law.....	1374
2.3 Emergency rule	1375
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1378

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1379
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1380
2.7	Legal regulations for international engagements of first responders and crisis managers	1380
3	Organisation	1381
3.1	Organisational chart	1383
3.2	Organisational co-operation	1388
4	Procedures	1391
4.1	Standing Operating Procedures (SOPs) and Guidelines	1391
4.2	Operations planning	1391
4.3	Logistics support in crises	1392
4.4	Crisis communication; Alert system; Public Information and Warnings	1392
5	Capabilities	1397
5.1	Human resources	1397
5.2	Materiel (non-financial) resources	1397
5.3	Training	1398
5.4	Procurement	1398
5.4.1	Procurement regulation	1398
5.4.2	Procurement procedures	1398
5.5	Niche capabilities	1399
6	Conclusion	1400
	Resources	1401
	Legislative acts	1401
	Other normative acts	1401
	Official documents (white papers, strategies, etc.)	1403
	Online resources (websites of key CM organisations)	1403
	Publications	1404
	Expert interviews	1405

List of Figures

<i>Figure 1: Seismicity map of Romania for the period 1900 – 2012.</i>	1345
<i>Figure 2: Seismic hazards from Vrancea seismic zone.</i>	1346
<i>Figure 3: Usually the most affected counties by floods.</i>	1347
<i>Figure 4: Most affected areas by the 2010 floods (June 29 – July 1).</i>	1348
<i>Figure 5: Average number of months/year with drought (referenced period 1951-2010).</i>	1350
<i>Figure 6: Nuclear risks areas in Romania</i>	1351
<i>Figure 7: Chemical industry risks areas in Romania.</i>	1352
<i>Figure 8: Flow of information in the Romanian National Emergency Management System.</i>	1372
<i>Figure 9: Protesters against “special security zone” in Plungesti.</i>	1378
<i>Figure 10: The Government’s Command Operational Centre (COCG) at the Victoria Palace.</i>	1382
<i>Figure 11: General structure of NEMS.</i>	1384
<i>Figure 12: Institutional chain of command by levels of activation.</i>	1385
<i>Figure 13: Sharing of responsibilities within the NEMS.</i>	1387
<i>Figure 14: Romanian Emergency Management Information System within the NEMS.</i>	1393
<i>Figure 15: EMIS operational process.</i>	1394
<i>Figure 16: EMIS modular architecture</i>	1394
<i>Figure 17: EMIS information workflows</i>	1395

List of Tables

<i>Table 1. Natural hazards, which affected or may affect Romania.</i>	1342
<i>Table 2. Summarised table of natural disasters in Romania between 1900 and 2014.</i>	1342
<i>Table 3. Disasters in Romania for the period 1900 – 2014 with strongest impact.</i>	1344
<i>Table 4. Average disasters per year.</i>	1344
<i>Table 5. Droughty/rainy years in Romania, 1901-2010.</i>	1348
<i>Table 6. Elaboration of the Romania’s civil protection strategic goals for the periods 2011-13 and 2013-15.</i>	1355
<i>Table 7: Dedicated resources to implement disaster risk reduction activities in 2011-13 and 2013-15.</i>	1364
<i>Table 8. EU Solidarity Fund for Romania.</i>	1366

List of Abbreviations

ASRO	Romanian Standards Association (Asociatia de Standardizare din România)
ASVSU	Association of Voluntary Rescuers in Emergency Situations
BSEC	Organization of the Black Sea Economic Cooperation
CMEPC SEE	Civil Military Emergency Planning Council for South-Eastern Europe
CN APELL	National Centre APELL for the Disaster Management
COCG	Government's Command Operational Centre
DREF	Disaster Relief Emergency Fund
EADRCC	Euro-Atlantic Disaster Response Coordination Centre (NATO)
ECMWF	European Centre for Medium-range Forecasts
EMIS	Emergency Management Information System
EMIS	Romanian Emergency Management Information System
EOC	Emergency Operational Centres Single National Emergency Call System (SNECS)
ERCC	Emergency Response Coordination Centre (EU; former MIC)
EUMETNET	European National Meteorological Services
EUMETSAT	Organisation for the Exploitation of Meteorological Satellites
EUSF	European Union Solidarity Fund
GFDRR	UN Global Facility for Disaster Reduction and Recovery
GIES	General Inspectorate for Emergency Situations
HFA	Hyogo Framework for Action
HIS	Hydrological Information System
ICPO	International Organisation of Civil Protection
IFRC	International Federation of Red Cross and Red Crescent Societies
IGAR	Institute of Geography
INCERC	National Institute for Building Research
MIC	Monitoring and Information Centre of the EU (renamed to Emergency Response Coordination Centre)
NCES	National Committee for Emergency Situations
NEMS	National Emergency Management System
NIEP	National Institute of Research and Development for Earth Physics ()
NPP	Nuclear Power Plant
PAID	National Disaster Insurance Pool
REWS	Rapid Early Warning System in Romania
SMURD	Mobile Emergency Service for Resuscitation and Extrication
UNEP	UN Environment Programme

1 Policy

According to the National Strategy on Civil Protection, Romania emphasises disaster risk reduction and emergency management policy as one of the pillars of national security. Recently, it is focused on a combination of legislative and organisational measures, capability building and training efforts and actions in cases of emergencies. In a long-term perspective, the strategy is directed towards building a culture of safety and resilience. In order to achieve such progress, national, regional and local development programs and projects are and will be subsumed to the principles of sustainable development, environmental impact prevention and reduction, responsibility and protection of citizens against disasters.¹⁸⁵²

The policy-making and implementation mechanism is established around the following main phases: risk assessment, analyses, monitoring, alerting, decision-making, and interventions.

According to the Romania National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015), “In 2013 GIES (General Inspectorate for Emergency Situations) has initiated a EU fund project for national risk assessment. This project will develop a common set of tools for assessment: a unitary methodology, data-base and WebGIS portal. These instruments will contribute to a unitary assessment of all risks in order for the results to be compared and the investments to be prioritised. The national risk assessment will be coordinated by National Risk Assessment Working Group,¹⁸⁵³ which is a part of The National Platform.”¹⁸⁵⁴

1.1 Risk Assessment

According to an official statement, “Romania’s territory is exposed to a large number of natural risks as a result of its geographical position and landscape, such as: earthquakes, floods, landslides, dangerous meteorological phenomena and forest fires, as well as, industrial risks as result of economic activities which use technologies with hazardous materials.”¹⁸⁵⁵ However, despite growing public demands for proper disaster management, the current open source risk assessments are mostly focused on the character and likelihood of occurrence of hazards, and much less on various types of exposure – physical, social, economic and environmental as a minimum. Vulnerability, as a result from the interaction between hazards (harmful events) and the structural components, exposed to them, could provide more relevant and useful (in terms of crisis management policy) assessment of risks associated with natural and technological hazards. In result, the data and studies are dominantly of quantitative character and do not provide enough convincing picture of disaster risks in Romania. (Tanislav, 2009)

¹⁸⁵² *National Strategy on Civil Protection* (Published in Official Gazette no. 600 as of 12 July 2005).

¹⁸⁵³ National Risk Assessment Working Group, being a part of the National Platform, is not legally established yet in 2015.

¹⁸⁵⁴ Romania National Progress Report on Implementation of Hyogo Framework for Action (2013-15), p.11.

¹⁸⁵⁵ Statement of Romania, Delivered by Dr. Raed Arafat, Secretary of State, Ministry of Internal Affairs, Head of The Emergency Situations Department at the 3rd World Conference for Disaster Risk Reduction (Sendai, Japan, 14th-18th March 2015). Available at [http://www.preventionweb.net/files/globalplatform/romania\[1\].pdf](http://www.preventionweb.net/files/globalplatform/romania[1].pdf).

Natural hazards

In terms of systematic study of natural hazards, Table 1 provides categorisation by Romanian scholars based on historical evidences or likelihood of occurrence.

Table 11. Natural hazards, which affected or may affect Romania.

SUBGROUPS	CATEGORIES	SUBCATEGORIES	TYPES
1.Cosmic (astrophysics) hazards	Cosmic corps fall		Meteors fall
	Cosmic corps clink		Comets, asteroids, stars clink
	Cosmic corps blast		Gamma radiations
2.Geological hazards	Hazards produced by internal factors of the Earth		Earthquakes
			Volcanic eruptions
	Hazards produced by external factors of the Earth	Movement of released soils, roks and sediments masses	Landslides
			Falls, rolling land-slide or crumbling of rocks
		Movement of snow and ice masses	Avalanches
3.Hydro-meteorological hazards	Movement of air masses		Storms, Blizzards, Tornados
	Movement of water masses	Movement of fresh water	Water flow, Torrents, Floods
		Movement of sea water	Storm waves
		Movement of fresh and sea waters	Floods on the Danube
	Electrical discharges		Lightnings, Thunders
	Frost phenomena of water	Frost water in air	Fogs, Hails
		Frost water on rivers	Ice floes, Ice bridges
	Moisture deficiency		Droughts
	Excessive temperatures		Very high temperatures
			Very low temperatures
			Arsons of forest
4.Biological hazards	Epidemics	Epidemics caused by bacteria	Plague, Cholera, Anthrax, Leprosy, Brucellosis
		Epidemics caused by viruses	Smallpox, Encephalitis, Meningitis, Malaria, Influenza, West Nile, SARS, HIV
		Epidemics caused by rickettsii	Foot and mouth disease, Typhus
		Epidemics caused by toxins	Botulism
		Epidemics caused by unknown causes	Balkan endemic nephropathy (NEB)
	Epizootics	For people and animals	Cholera, Plague, Brucellosis, SARS, Foot and mouth disease, Glanders, Ornitoza-psittacosis
			Pig pesta
		For animals	Caterpillars invasion
	Invasions of insects		Grasshoppers invasion

Source: Marinescu et al., 2010.

In terms of monitoring and analysis of natural hazards in Romania, the scope is quite large and typical for a continental European country. However, the focus is placed mostly on earthquakes, floods and landslides and extreme temperatures (including droughts). Table 2 provides an overall picture of natural hazards for a period longer than a century.

Some of the crises have been of national importance, involving mobilisation of the various services, while the greater number caused local or regional disturbances. The floods in 2005, 2006, 2008, and 2010 are among the major disasters of the last decade. The types of disasters encountered in Romania are the following: floods, heavy snowfalls, strong storms, earthquakes, landslides, epidemics, nuclear, chemical or biological accidents, infrastructure accidents, hazardous material spills, large fires and water works accidents.¹⁸⁵⁶ Table 3 presents natural disasters in Romania with strongest negative impact.

Table 12. Summarised table of natural disasters in Romania between 1900 and 2014.

¹⁸⁵⁶

Source: <http://www.lege-online.ro/portal-legislatie>.

Disaster	Characteristic	Number of events	Victims	Total Affected	Damage (000 US\$)
Drought	Drought	2	-	-	500000
	average per event		-	-	250000
Earthquake (seismic activity)	Earthquake (ground shaking)	13	2630	392850	2010000
	average per event		202.3	30219.2	154615.4
Epidemics (Bacterial Infectious Diseases, Viral Infectious Diseases (Acute respiratory syndrome (SARS))	Bacterial Infectious Diseases	2	-	5270	-
	average per event		-	2635	-
	Viral Infectious Diseases	1	-	1	-
	average per event		-	1	-
Extreme temperature	Cold wave	10	323	9259	-
	average per event		32.3	925.9	-
	Extreme winter conditions	1	68	-	-
	average per event		68	-	-
	Heat wave	8	138	1000	-
	average per event		17.3	125	-
Flood	Unspecified	5	1278	1241715	550000
	average per event		255.6	248343	110000
	Flash flood	5	27	24712	-
	average per event		5.4	4942.4	-
	General flood	34	398	367399	1936190
	average per event		11.7	10805.9	56946.8
Mass movement wet	Landslide	1	-	330	-
	average per event		-	330	-
Storm	Unspecified	4	20	1460	-
	average per event		5	365	-
	Extra-tropical cyclone	1	-	90	-
	average per event		-	90	-
	Local storm	5	30	6906	-
	average per event		6	1381.2	-

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels – Belgium

Table 13. Disasters in Romania for the period 1900 – 2014 with strongest impact.

Disaster	Date	Number of victims	Number of affected	Damage (US\$ 000)
Earthquake (seismic activity)	04/03/1977	1641	386 300	2 000 000
Flood	1926	1000		
Earthquake (seismic activity)	10/11/1940	980		
Flood	11/05/1970	215	122 320	500 000
Flood	29/07/1991	108	15 000	
Extreme temperature	23/01/2012	86		
Extreme temperature	20/01/2006	68		
Flood	07/75	60	1 000 000	
Extreme temperature	18/11/1998	60		
Extreme temperature	22/01/2010	52		
Flood	21/09/2005		30 800	
Flood	05/04/2000		60 431	500 000
Flood	13/03/2006		17 071	
Flood	12/07/2005		14 669	800 000
Flood	28/07/2004		14 128	
Draught	07/2000			500 000
Flood	21/04-14/08/2005			313 000
Infectious disease – Swine flu, H1N1	2009	122	7 008	

Source: compilation of data from "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels – Belgium."

The average number of the various types of natural disasters per year presents significant dominance of the hazards related to the climate and meteorological conditions (Table 4).

Table 14. Average disasters per year.

Drought:	0.06
Earthquake*:	0.10
Epidemic:	0.10
Extreme temp:	0.55
Flood:	1.26
Mass mov. wet:	0.03
Storm:	0.29
Wildfire:	...

Source: UNISDR Prevention Web¹⁸⁵⁷

Earthquakes

Romania is one of the most seismically active countries in Europe. According to a World Bank-sponsored study (WB, 2007), "Even though, as per EM-DAT, earthquakes comprised just 5 per cent of all hazards recorded in the country during 1974-2006, there have been some damaging and catastrophic earthquakes in Romania in the past. Historic records show that the earthquake of 1940

¹⁸⁵⁷

Available at <http://www.preventionweb.net/english/countries/statistics/?cid=141>.

had 980 fatalities while the 1977 earthquake had 1,641 fatalities and led to economic damages of USD 2 billion.”¹⁸⁵⁸

Even though Romania has not recorded any major earthquake in the last three decades, the vulnerability of the country to earthquakes is of special concern for the state authorities. Many of the disaster management measures taken are driven by earthquake considerations. Vrancea seismic zone is the main source of concern (in the past 300 years, a single major seismic event occurred with an epicentre outside this area – in 1916). The map below illustrates the concentration of the earthquake threat.

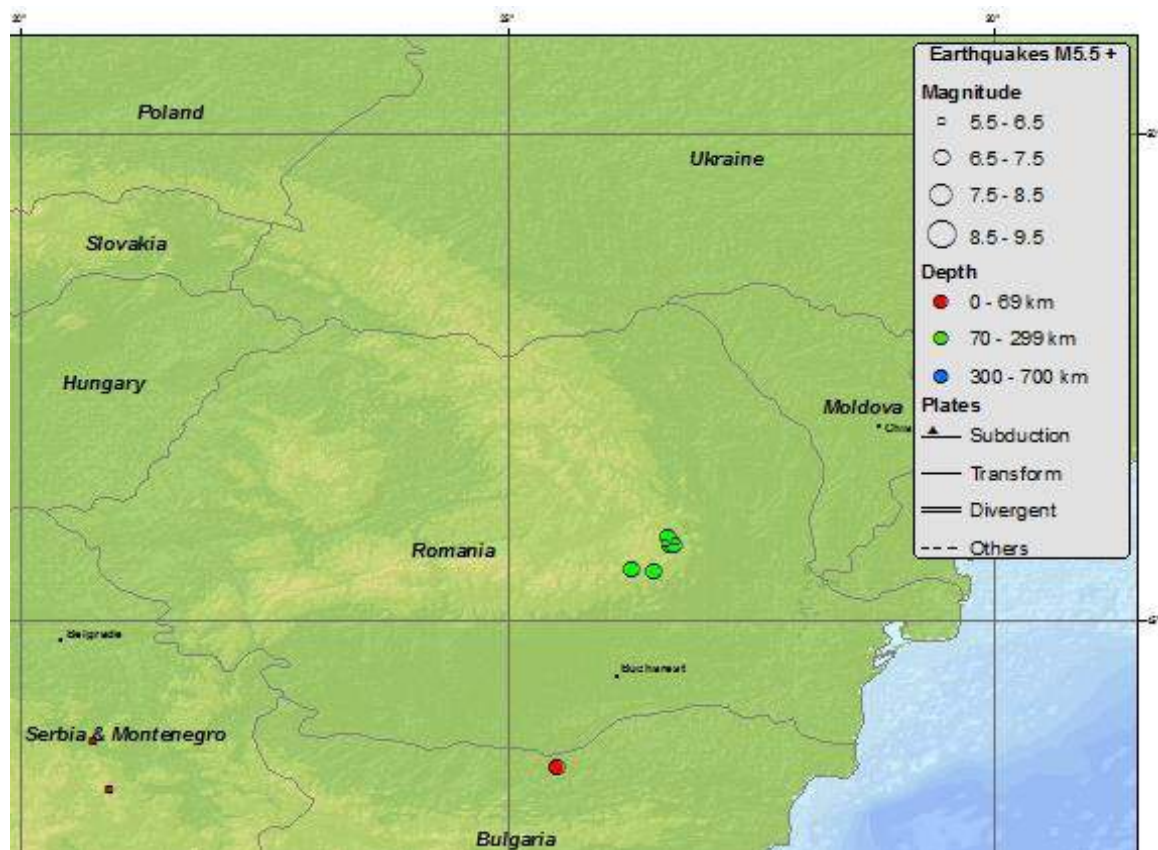


Figure 11: Seismicity map of Romania for the period 1900 – 2012.

Source: United States Geological Survey's (USGS) Earthquake Hazards Program¹⁸⁵⁹

As Figure 2 shows, in a case of serious seismic activities within the Vrancea zone more than 50% of the territory of the country could be affected. However, from vulnerability risk point of view, Romanian research data indicate that within the area of higher seismic activities (probabilities) there is not significant population concentration, national critical infrastructure or industrial businesses, using dangerous substances. (Ozunu, 2011)

¹⁸⁵⁸ The World Bank, UN International Strategy for Disaster Reduction (WB, 2007), *South Eastern Europe Disaster Risk Management Initiative: Desk Study Review Risk Assessment in South Eastern Europe – Final Report* (India: RMSI Private Initiative), p. 28. Available at http://www.unisdr.org/files/1741_SouthEasternEuropeDRMitigation.pdf.

¹⁸⁵⁹ Available at <http://earthquake.usgs.gov/earthquakes/world/romania/seismicity.php>.

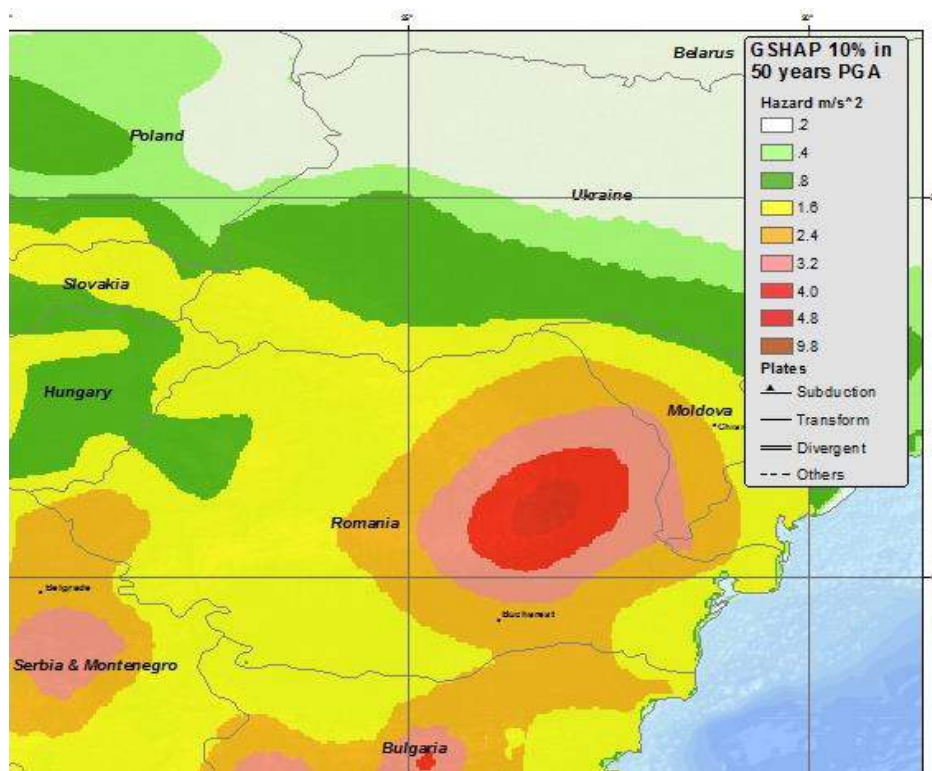


Figure 12: Seismic hazards from Vrancea seismic zone.

Source: United States Geological Survey's (USGS) Earthquake Hazards Program¹⁸⁶⁰

Floods

Romanian studies point at floods of internal rivers and of the Danube as the most frequent hazards usually having great economic and social consequences. Marinescu et al. revealed that

Annual occurrence is around 10-15 floods, with greater frequency at medium altitudes (in the mountains and Sub-Carpathians) and lower frequency towards the plain. Catastrophic floods are produced every 50 -100 years because of torrential rains combined with sudden snow melting. They are most frequently occurring in the western part of the country. Spring held regularly floods by melting snow, above which the overlap of spring rains. At the beginning of summer, they are wide spread in the country, being due to heavy rain. Autumns are rarer, due to rainfall during October-November and having a higher frequency in Banat and Oltenia. It is estimated that the maximum exposed flooding in our country is about 3.5 million ha, representing 15% of the country. (Marinescu, 2010)

Damage to the Romanian economy from large-scale floods, as those in 2005 and 2010, has exceeded 1.7 billion USD. As a result, the National Strategy for Civil Protection determines floods as one of the most dangerous natural phenomena that may require evacuation and sheltering of a mass number of population. Figure 3 illustrates the most affected by floods areas of Romania recently.

¹⁸⁶⁰

Available at <http://earthquake.usgs.gov/earthquakes/world/romania/gshap.php>.

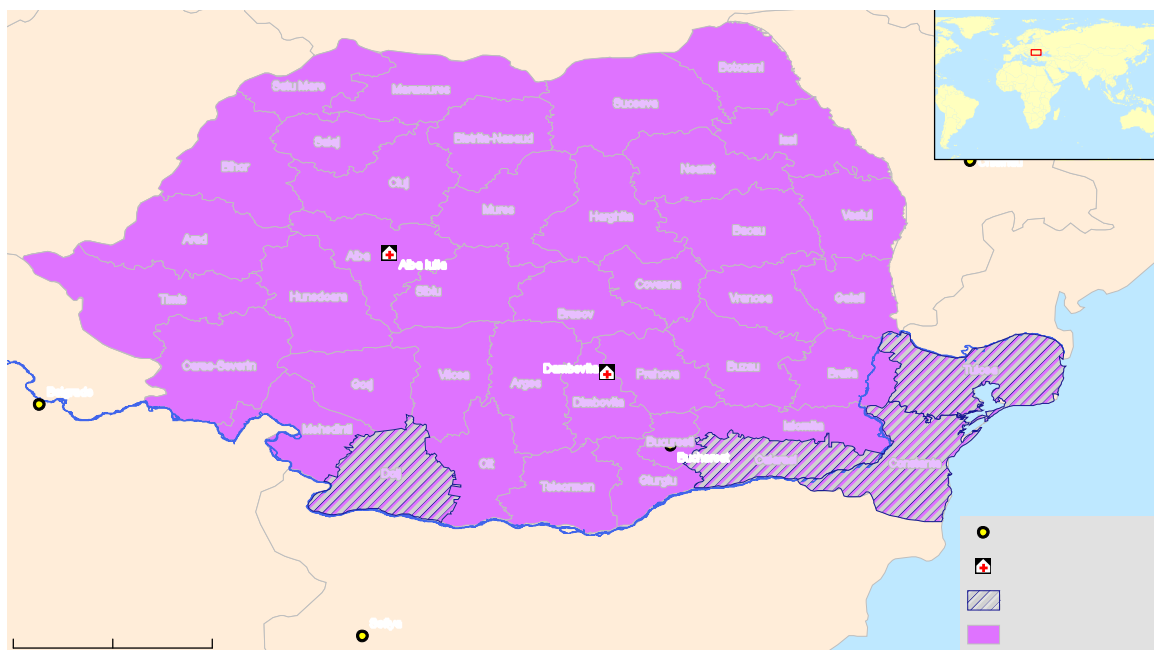


Figure 13: Usually the most affected counties by floods

Source: Federation of Red Cross and Red Crescent Societies.¹⁸⁶¹

According to the information, published by the GIES, regarded the Romanian experience in flood management, “Following the severe rainfalls that affected Romania starting 21.06.2010, 37 counties out of a total of 41 were seriously affected by floods, torrents, flash floods or land slides. The most affected counties were in the NE part of the country: Iasi, Suceava, Neamt, Bacau, Botosani, Covasna, Galati and Vaslui.¹⁸⁶² The GIES provides the following information for the damage, cause by this disaster:

- More than 6 746 700 persons have been affected, 19 997 have been temporary evacuated and 23 deceased;
- 8 882 houses have been affected at different levels, approximately 700 km of protective works/embankments have been destroyed, 35 dams damaged;
- 5 257 km of national, county and local roads have been affected together with 707 bridges and 2 729 small bridges;
- In the agriculture sector 110 585 hectares of crops, 33 110 hectares of pastures, vineyards and 8 220 hectares of saplings have been completely wasted;
- Many public utilities like schools, kindergartens, hospitals, churches, etc. were damaged at different levels.
- The estimated direct damages are approximately 875 million EUR.¹⁸⁶³

Figure 4 illustrates the most affected areas during the 2010 floods.

¹⁸⁶¹ Available at http://reliefweb.int/sites/reliefweb.int/files/resources/0FF3563DE9D39410C1257161002AF351-ifrc_FL_rou010506.pdf.

¹⁸⁶² Source: GIES, at http://www.igsu.ro/documente/SAEARI/ROMANIA_Floods_2010.pdf.

¹⁸⁶³ Ibid.

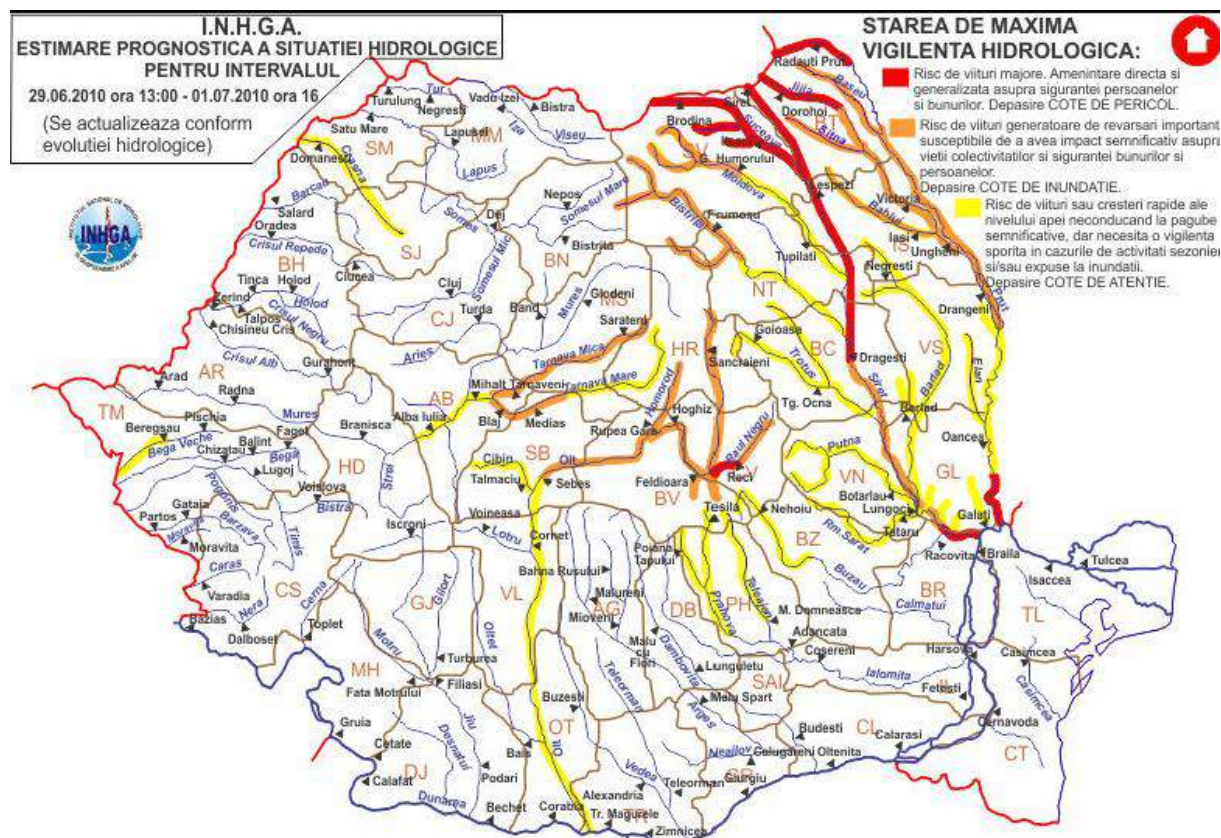


Figure 14: Most affected areas by the 2010 floods (June 29 – July 1).

Source: GIES presentation

Droughts

The National Strategy for Civil Protection determines droughts as one of the main natural phenomena that may threaten the Romanian population.¹⁸⁶⁴ Droughts are seen as resulting from variations of temperature that might be frosts, droughts, and heat waves. Elena Mateescu et al. argue that “[i]n Romania, the drought affects 7.1 million ha, which represent 48% from the total agricultural land.”¹⁸⁶⁵ According to their study, “[t]he South, Southeast and East parts of the country are the most hit areas (<600 m³ water/hectare – extreme and severe pedological drought) during the extremely droughty years average yields of various crops representing only 35-60 per cent of the potential yields.”¹⁸⁶⁶ The research also emphasises that, “[s]ince 1901 until now (2013), Romania has seen in every decade one to four extremely droughty/rainy years, an increasing number of droughts being more and more apparent especially after 1981.”¹⁸⁶⁷ The statistics in Table 5 illustrate this conclusion.

Table 15. Droughty/rainy years in Romania, 1901-2010.¹⁸⁶⁸

¹⁸⁶⁴ National Strategy on Civil Protection (Published in Official Gazette no. 600 as of 12 July 2005), p. 3.

¹⁸⁶⁵ Mateescu, E. M. Smarandache, N. Jeler and V. Apostol “Country Report Drought conditions and management strategies in Romania” for the Initiative on “Capacity Development to support National Drought Management Policy” (WMO, UNCCD, FAO and UNW-DPC). Available at www.ais.unwater.org/ais/pluginfile.php/548/mod_page/content/65/Romania_CountryReport.pdf.

¹⁸⁶⁶ Ibid.

¹⁸⁶⁷ Ibid.

¹⁸⁶⁸ Ibid.

Decade	20 th Century	
	Extremely Droughty Years	Extremely Rainy Years
1901-1910	1907-1908	1910
1911-1920	1917-1918	1911, 1912, 1915, 1919
1921-1930	1923-1924, 1927-1928	1929
1931-1940	1934-1935	1937, 1939, 1940
1941-1950	1945-1946, 1947-1948, 1949-1950	1941, 1944, 1947
1951-1960	1952-1953	1954, 1955, 1957, 1960
1961-1970	1962-1963, 1964-1965	1969, 1970
1971-1980	1973-1974, 1975-1976	1972, 1974, 1975, 1976
1981-1990	1982-1983, 1985-1986, 1987-1988	1981, 1990
1991-2000	1992-1993, 1997-1998, 1999-2000	1991, 1997
21st Century		
2001-2010	2000-2001, 2001-2002, 2002-2003, 2006-2007, 2008-2009	2005, 2006, 2010
2011-...	2011-2012	

Source:
Mateescu, E. M.
Smarandache, N.
Jeler and V.
Apostol
"Country Report
Drought conditions
and management
strategies in
Romania"

" for the Initiative on "Capacity Development to support National Drought Management Policy" (WMO, UNCCD, FAO and UNW-DPC).

According to a vulnerability assessment by the European Environment Agency,¹⁸⁶⁹

drought related periods (regarding intensity, duration and spatial extension) have been more frequent and severe in the last decade and have had a very negative effect upon crop yields. Some of the years may be considered as catastrophic given their impact on the main yield of winter wheat and maize crops – the most important crops in Romania. Some research studies and data from the Ministry of Agriculture and Rural Development have shown that the decline in crop yields reached 40-60%, especially in the southern part of the Romanian Plain. In the excessive drought years, the main crop yields have been partially or entirely compromised in the areas without irrigation systems. The critical development stage of these crops (formation of the reproductive organs during flowering and grain filling) very often coincides with almost total depletion of the available water supply in the soil and with the maximum evapotranspiration demand.

Figure 5 below shows a general picture of how long a drought takes across Romania's territory.

Technological hazards

In terms of technological hazards, the major risks in Romania are associated with nuclear plants, mining and chemical (petrochemical and rubber) industry.

Nuclear

Risks from nuclear pollution are associated with the Romanian nuclear power plant (NPP) at Cernavoda and the Bulgarian one at Kozlodui.

¹⁸⁶⁹ European Environment Agency (EEA, 2009), *Water resources across Europe – confronting water scarcity and drought. Technical report No 2/2009*. Quoted at www.climateadaptation.eu/romania/droughts/.

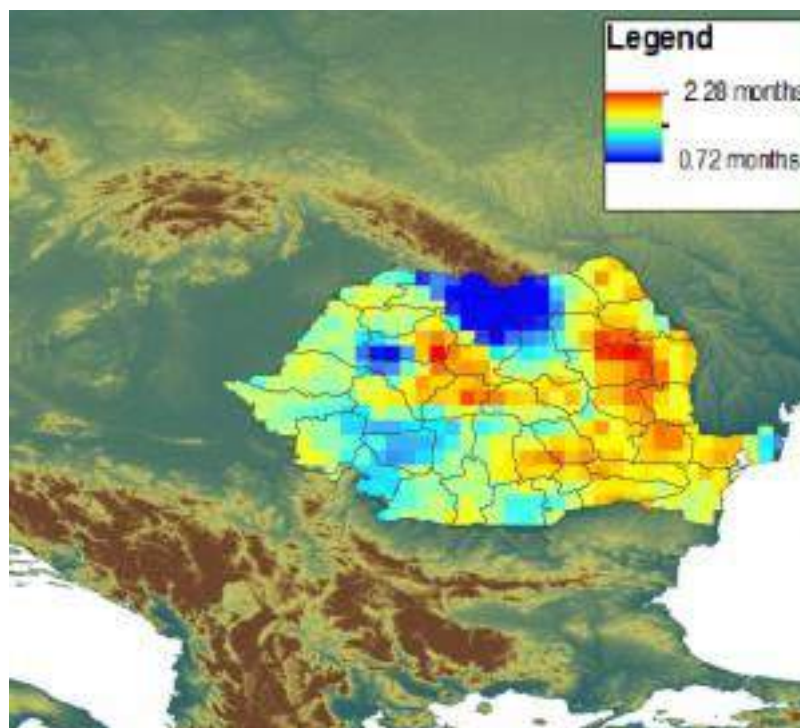


Figure 15: Average number of months/year with drought (referenced period 1951-2010).¹⁸⁷⁰

Source: European Drought Observatory, quoted by Popescu, A. *The dry road to vulnerability – A close-up of Romania's vicious dry spells* (September 2013).

The Cernavoda nuclear power plant is part of the 1980s strategy of the communist regime to make the country fully energy independent. According to an updated observation study, "... the big dam projects on the Danube River – Iron Gate II, Turnu Magurele and Silistra, large hydro projects in the Carpathian Mountains, and ambitious wind energy plans in the Danube Delta had to be realised and implemented. In fact, only several hydro projects in the Carpathian Mountains and the Iron Gate II became a reality."¹⁸⁷¹

The same study reports that with the end of Communism, "the Cernavoda project was halted, but shortly afterwards, construction of unit 1 continued, coming on-line on 11 July 1996. After this, construction of Cernavoda 2 was also restarted, which came on line on 7 August 2007."¹⁸⁷² In terms of design, "reactors in Cernavoda are based on the Canadian CANDU6 design, which, according to the Western European Nuclear Regulators Association, has not changed since 1979."¹⁸⁷³

The Kozloduy NPP in Bulgaria has two operational reactors (Russian design VVER 1000), while four of older design were closed down. Intentions have been announced to build a new reactor, based on a different technology, but experts question to utility of the project.¹⁸⁷⁴

¹⁸⁷⁰ Popescu, A. *The dry road to vulnerability – A close-up of Romania's vicious dry spells* (September 2013). Available at <http://earthjournalism.net/stories/the-dry-road-to-vulnerability-2013-a-close-up-of-romania2019s-vicious-dry-spells>.

¹⁸⁷¹ BankTrack, *Dodgy deal: Cernavoda nuclear power plant (units 3 & 4)*. Updated on October 14, 2015. Available at www.banktrack.org/show/dodgydeals/cernavoda_nuclear_power_plant_units_3_4_.

¹⁸⁷² Ibid.

¹⁸⁷³ Ibid.

¹⁸⁷⁴ Cf.

www.capital.bg/politika_i_ikonomika/bulgaria/2015/04/01/2504355_proektut_za_sedmi_blok_na_aec_kozlodui_propada/.

Other sources of concern are nuclear reactors used for research and engineering purposes. Figure 6 below illustrates the dislocation of nuclear facilities and estimates of the risks from the major nuclear facilities in Romania and bordering Bulgaria.

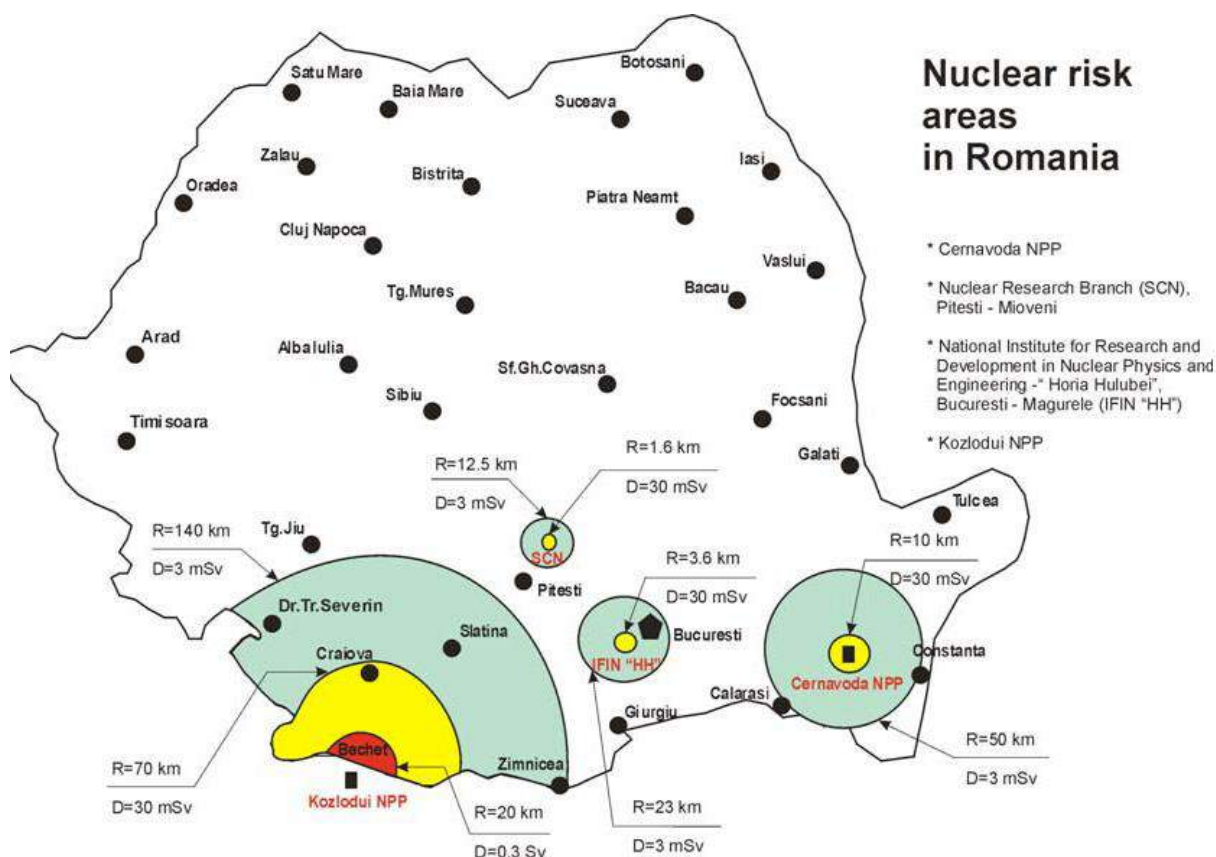


Figure 16: Nuclear risks areas in Romania

Source: UNISDIR, 2008. Courtesy of the Romanian General Inspectorate for Emergency Situations.

Mining-environment

Technological hazards relate also to industrial mining and storing related waste. In one notable case, “on 30 January 2000, the dam containing toxic waste material from the Baia Mare Aurul gold mine in North Western Romania burst and released 100 000 cubic meters of wastewater heavily contaminated with cyanide, into the Lapus and Somes tributaries of the Tisza river, one of the biggest in Hungary. The cyanide-contaminated water was carried to the river Danube that flows through Serbia, Bulgaria and Romania.”¹⁸⁷⁵ Reports from the area indicate that there was extensive damage to the river ecosystem and its fauna (between 80 and 100 per cent of the fish stock has been killed) while another wildlife has also been affected, including Mute Swans, Black Cormorants, foxes and other carnivores. The dam has been built as recently as 1998, and owned by Romanian interests and an Australian company. (UNEP/OCHA, 2000)

Chemical industry

The chemical industry in Romania is a traditional branch – one of the largest in Eastern Europe. According to the Romanian Ministry of Finance, at the end of 2011 there have been “...4 598

¹⁸⁷⁵ Kanthak, J., Greenpeace report: *The Baia Mare Gold Mine Cyanide Spill: Causes, Impacts and Liability*. Available at <http://reliefweb.int/report/hungary/baia-mare-gold-mine-cyanide-spill-causes-impacts-and-liability>.

companies operate in the sector, generating a total turnover of €10.53 billion and employing 89 696 people.”¹⁸⁷⁶ More than 75% of them are micro business while only 7% could be classified as middle (248), large (48) and very large (10 with more than 1 000 employees). Their main activities could be grouped in four clusters: Manufacture of coke and of refined petroleum products (19), manufacture of chemicals and chemical products (20), manufacture of basic pharmaceutical products and pharmaceutical preparations (21), and manufacture of rubber and plastic (22).¹⁸⁷⁷ However, according to the Romanian Chemicals Producers and Distributors Association the number of companies in the chemical sector has declined at the end of 2013 with 22 per cent compared with two years earlier.¹⁸⁷⁸

As Figure 7 illustrates that most of the production sites are distributed South from the Carpathian Mountains where are located the main oil sources and big refineries, and the highly populated areas as well.



Figure 17: Chemical industry risks areas in Romania.

Source: UNISDIR, 2008. Courtesy of the Romanian General Inspectorate for Emergency Situations.

1.2 Policy and Governance

Romania has been exposed to a range of natural disasters and several industrial catastrophes during the last several decades, causing human, economic, social and psychological distress and damages.

¹⁸⁷⁶ Quoted by Claudiu Tuncu, President Romanian Chemicals Producers and Distributors Association (APDCR) in a publication for *Landscape of the European Chemical Industry*. Available at <http://www.cefic.org/Documents/Landscape-European-chemical-industry/Landscape-of-the-European-Chemical-Industry-March-2014.pdf>.

¹⁸⁷⁷ Source: The Coface Economic Publication Panorama, 2013.

¹⁸⁷⁸ Ibid., Claudiu Tuncu.

Modern crisis management policy for civil security is still in a process of setting up. Similar to other former communist countries, the culture behind policy-making and implementation is dominantly reactive and, to a minimum degree, preventive and proactive. From a social psychological point of view, the general expectation is that any kind of emergency preparedness, actions and reactions are the exclusive responsibility of the state, while the role of the citizens is minimal, even concerned their own property and values.

Such a cultural mindset robustly reflects the building of country's new crisis management architecture, namely the set of institutions, norms, procedures and practices. Similar to other former Warsaw Pact countries, the civil security system in Romania has been built as a component of the national defence organisation with typical characteristics as a strong centralisation (more power to the "centre" than to any local authority), hierarchical decision-making and ministerial based resourcing. It has been organised to address mostly the consequences of war (both conventional and nuclear) and, as a secondary function, those from natural disasters and industrial accidents.

A strong signal about the need of serious improvements in the civilian protection organisation of the country have been the tragic consequences of the 1997 earthquake in Vrancea: 7.2 on the Richter scale caused 1 570 dead (according to other sources, 1 578), 11 300 injured, 32 900 houses collapsed or severely damaged, 35 000 families displaced, 763 business units affected. The damage amounted to 10 billion lei, the equivalent of more than USD 2 billion. The lesson has been to establish a new professional civil protection organisation at both national and local levels. Zulean and Prelipcean (2012) argue that the "Law no.2/1978 regarding civilian defence set up the norms, rules and institutions both on a national and a local level to take measures in the case of natural and man-made disasters within the system of national defence." Despite the fact that the new arrangements place the civilian defence again under the umbrella of the Minister of Defence, there is a special Commandment of Civilian Defence, consisting of non-uniformed professionals.

The first in Romania civilian organisation for emergency management has been established in 1996 under the supervision of the Minister of Interior. The Law of Civil Protection No 106 sets a unified design for the responsibilities of the personnel in charge of that matter and laid down guidance for operations in emergency situations.

Over the last two decades, the focus on over-centralisation has been shifted (very slowly) towards the establishment of a system that is more relevant to the contemporary European crisis management practices. However, several international research and assessment projects have identified serious weaknesses in key components of policy-making, organisation, legislation and professional performance. For example, a World Bank's country report from the Hazard Risk Mitigation & Emergency Preparedness Project indicated that "The current institutional setup and technical capacity are obsolete and do not match the requirements of a modern emergency management system, nor the requirements of the EU integration" (WB, 2004-11). This conclusion is confirmed by the risk assessment data presented above.

The major changes in policy-making and governance have took place in 2004 when the emergency management and civil protection service have been combined into a unified system called, "National System for Emergency Management" and the General Inspectorate for Emergency Situations has been established by merging and reorganising the General Inspectorate of the Military Fire-fighters Corps and the Civil Protection Commandment. (Nițică, 2013)

The current civil protection management in Romania is not organised strictly according to the modern emergency management construct that includes prevention, mitigation, preparedness, response and recovery or to the European Civil Protection Mechanism, adopted in 2007 (EC

779/2007, Euroatom). According to the Government Emergency Ordinance No 21/2004 (Art. 3), the principles of emergency management are:

- *Prediction and prevention;*
- *Priority protection and rescue of people's lives;*
- *Compliance with the fundamental rights and freedoms, accountability for emergency management of the public administration authorities;*
- *Cooperation at national, regional and international level with similar bodies and organisations;*
- *Transparency of activities carried out for the emergency management, continuity and gradualness of emergency management activities, efficiency, active cooperation and hierarchical subordination of the components in the National System.*

These principles have been transferred into a three-phase mechanism that actually reflects the preliminary risk reduction work, actions during emergencies and post-crisis activities:

- Pre-disaster measures and activities;
- Disaster response activities;
- Post-disaster measures and activities.

1.2.1 Strategy scope and focus

An international regional research project, led by UNISDR and the World Bank (UNISDR, 2008), identified that “civil protection is viewed in Romania both in terms of the traditional concept of protection and rescue and the broader notion, prevalent in the EU, that each citizen has the right to safety at home, at work and while travelling around the country. Moreover, each citizen has the right, as well as an obligation, to be trained in protection and rescue and to receive full and timely information about all threats of disaster, as well as all available protection measures and activities.”¹⁸⁷⁹

Crisis management and emergency preparedness in the context of natural and technological disasters seems to be a component of the National Security Strategy of Romania as it “refers primarily to the following fields and activities: the rule of law, citizens’ safety, public security and national defence, protection against natural disasters, degradation of living conditions and industrial accidents.”¹⁸⁸⁰

From normative point of view, the National Strategy on Civil Protection (2005) determines the civil protection in the following way:

Under the law, the civil protection is a component of the national security system and represents an integrated set of specific organisational, technical, operational, humanitarian and public information activities, measures and tasks, planned, organised and carried out for preventing and reducing disaster risks, protecting people, property and the environment against the adverse effects of emergencies, armed conflicts and their aftermath, and for operative removal and securing the conditions necessary for the survival of affected individuals. The protection of population is a

¹⁸⁷⁹ UNISDR, World Bank and others (UNISDR, WB, 2008), *The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe*, available at www.unisdr.org/files/9346_Europe.pdf.

¹⁸⁸⁰ The National Security Strategy of Romania, 2007, available at <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=156800>.

*national interest; it is a permanent function performed under the law by the central and local public administration authorities, other legal subjects and private Romanians.*¹⁸⁸¹

The scope of the civil protection strategy includes natural hazards and technological risks. Earthquakes, landslides and avalanches are emphasised along with floods, heavy snow and effects of temperature extreme variations such as frosts, droughts, and prolonged heat waves. Epidemics and epizootics are also foreseen as potential hazards. The technological risks are broadly defined as results from human activities that might threaten the life of people or destruct important infrastructures.

Generally, the crisis management strategy of Romania during the last two and more decades gradually moves in four main directions as thinking, approaching and developing:

- a) Towards progressively established balance between military/civil defence and civil security/civil protection. This process is not completed and is accompanied with inter-institutional frictions.
- b) From mostly consequence management towards prevention and risk reduction. A significant role for such developments plays the transposing of EU norms to the Romanian internal legal arrangements and the intensive international cooperation with the UN institutions, the World Bank, Germany, Norway, Japan, and others. An important result from the partnership with the World Bank is the development of Emergency Management Information System (EMIS).
- c) From a completely centralised system towards a vertical equilibrium in crisis management decision-making. This process is also not completed yet as its implementation requires the building of huge capacity for a large number of local and regional authorities. The decentralisation of funding is a component of this process as well.

Table 6 illustrates the gradual elaboration of the Romania strategic goals in the area of civil protection for the periods 2011-13 (NPR, 2011) and 2013-15 (NPR, 2013).

Table 16. Elaboration of the Romania's civil protection strategic goals for the periods 2011-13 and 2013-15.

¹⁸⁸¹ National Strategy on Civil Protection (2005), p.1.

Strategic Goal Area 1: The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statements 2011-2013

1. Establish the legal framework for National Platform for Disaster Risk Reduction.

2. A national policy and a plan for implementing disaster risk reduction measures at all levels and also a system to monitor the progress in this field are in place.

Strategic Goal Statements 2013-2015

1. Establish the new legal framework for National Platform for Disaster Risk Reduction according to changes made to the National System for Emergency Situations.

2. Also make The National Platform a functional organism it is priority because it will be the main entity dealing with the disaster risk management.

Develop a flood risk management plan for important areas until the end of 2015.

Strategic Goal Area 2: The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

1. Disaster risk reduction strategies and plans are based upon national risk assessment.

2. Local emergency volunteers' services are strengthened with a focus on prevention and preparedness.

3. Local authorities have responsibilities in implementing disaster risk reduction plans at community level.

1. Strengthening the prevention component of the volunteer emergency services.

2. Running an institutional analysis to identify the need for dedicated departments in order to implement the disaster risk reduction strategies.

3. Standardizing the information exchange protocols between responsible authorities for management of disasters in order to implement DRR in a unitary way at all levels.

Strategic Goal Area 3: The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

1. Lessons learned are integrated in response plans.

2. Local authorities ensure permanent update of General Urban Plan, taking into consideration the hazard maps.

3. Local emergency volunteers' services have sufficient personnel and better equipment.

1. Develop a methodology for damage and needs assessment in order to facilitate the incorporation of disaster risk reduction into the reconstruction phase.

2. Conducting a risk management capability assessment in order to prioritize investments for raising capacity.

Sources: *National progress report on the implementation of the Hyogo Framework for Action (2011-2013)*, available at www.preventionweb.net/files/31547_rou_NationalHFAprogress_2011-13.pdf; *National progress report on the implementation of the Hyogo Framework for Action (2013-2015)*, available at www.preventionweb.net/files/45286_ROU_NationalHFAprogress_2013-15.pdf.

1.2.2 Monitoring and analytical support to policy making; R&D

The Romanian authorities see the monitoring and analysis of hazards as one of the key objectives of the National Civil Protection System: “In order to achieve this fundamental goal, the strategy of civil protection in Romania defines the following objectives:

- Identifying, monitoring and managing the types of risks generating existing natural and technological disasters in Romania or on the territory of neighbouring states that could affect the national territory.”¹⁸⁸²

With respect to the functions of the National Emergency Management System, the following tasks pertain to that objective:

- To monitor the parameters of all obvious sources of risks;
- To collect and process data, to be shared within the system when they overcome established concrete limits of attention.

Monitoring and analyses are also seen as “prevention information.” Prevention information is the result of the application of a set of actions and measures that ensure relevant awareness of citizens and institutions on the existing and possible risks in a certain time and place (including through training and orientation), and on the protective measures and behaviour they should follow in case of emergency. Ministries and state agencies, local authorities, volunteers, healthcare service, media, environmental specialists, industry, and NGOs are engaged to collect and deliver out preventive information.

However, the system for monitoring of natural hazards has not been completely reformed. Some of the sectors have been developed within the environmental policy framework (water, air quality, Black sea water, forests, etc.) while others have been established after major natural disasters (earthquake, floods, landslides, etc.). They are at different levels of modernisation and operate more independently than as a system. In reality, there are several major areas and issues to monitor, from which the information flows towards various ministerial crisis management centres and to the GIES. Decision-making is either ministerial or for the committee that is supported by the GIES.

Monitoring is organised in the following way.

The most comprehensive and sustainable monitoring systems are:

- *Seismic monitoring and early warning system.* According to Marmureanu et. al. (2010), “The early warning system consists of several different parts: a dedicated acquisition system, algorithms to rapidly detect seismic events, algorithms that eliminate false detections and alarms and methods to estimate the earthquake’s magnitude and to send the warning to the users. All of these parts have been designed to work automatically, in real time, without interruption for a long period. ...The average absolute error is low of 0.171 magnitude degrees. The software developed by National Institute for Earth Physics was tested during the Vrancea earthquake on April 25, 2009, when the magnitude (Mw=5.7) of the earthquake was computed in the first 4 seconds with an accurate value.”¹⁸⁸³
- *A meteorological system for the prevention of hazards associated to severe hydro-meteorological phenomena.* The National Meteorological Administration maintains an automated national meteorological system. The core of the system is the National Meteorological

¹⁸⁸² National Strategy on Civil Protection (2005), p.5.

¹⁸⁸³ Source: Romanian presentation at The Third International Disaster and Risk Conference IDRC Davos 2010 Davos, Switzerland, available at <http://www.slideshare.net/GRFDavos/davos-2010prezentareppt>.

Forecast Centre, which provides data collection from different sources as radars, and surface automatic observation stations for air/water and rainfalls measurements and forwards information to a variety of operational bodies. As stated in the Romania report (HYOGO, 2005), “[a]mong the benefits of this new system are: continuum information and data flow regarding the hydrological and meteorological status; the compatibility and informational integration with other international meteorological networks; anticipation of the water quantities (rain and snow) that will fall in a certain area on an certain period of time; the anticipation of the floods produced by the rainfalls, storms, tornados and torrents; the anticipation of the atmospheric pollution dispersion; the anticipation of the rain and ice storms (the areas where the aerial electric and phone wire network will be affected).”¹⁸⁸⁴ According to Gabriela Isac, the Romanian meteorological monitoring system includes “159 surface weather stations (110 automated and 49 classical), of which: 55 stations with an agro-meteorological programme, 9 stations performing actinometrical observations, 2 upper-air stations, 8 Doppler radar systems, a detection of atmospheric electric discharges system, a system for the reception of MSG satellite data and 70 rain gauges.”¹⁸⁸⁵

- *Hydrological risk monitoring.* According to Gabriela Isac, “The Hydrological Information System (HIS) and the organisations it supports are divided into multiple levels of operational responsibility, including sensor-level operations, sub-basin level operations, basin-level operations, and national-level operations. Each of those operational levels is further broken down into elements dealing with automated sensors, hydrological operations processing, dispatch operations processing, communications, and interfaces with existing Romanian infrastructures.”¹⁸⁸⁶
- *Integrated water monitoring system* in Romania has been established in accordance with Article 8 (1) of the Water Framework Directive (2000/60/EC). It has been operational since 2006 and includes six subsystems covering rivers, lakes, transitional waters, coastal waters, groundwater, and wastewaters (control monitoring of wastewater discharged into natural receivers). The monitoring of the water is done by the National Administration “Romanian Waters” through its territorial units (in some sections of the Danube delta and in coastal waters the monitoring is done by the National Institute of Development Research “Danube Delta” – Tulcea and the National Marine Research Institute that “Gheorghe Antipa” – Constanta).¹⁸⁸⁷

According to Government Ordinance No 2288/2004, Annex 2, the functions related to monitoring of hazards and risks and their negative effects are divided among various ministries and state agencies in the following way:¹⁸⁸⁸

- Centralisation of data and information on hazards and risk monitoring, as well as their negative effects: Ministry of Internal Affairs through the GIES;
- Quality of air monitoring: Ministry of Environment and Climate Change;

¹⁸⁸⁴ National Report Regarding the Disasters Prevention in Romania (HYOGO, 2005), p. 17. Available at <http://www.unisdr.org/2005/mdgs-drr/national-reports/Romania-report.pdf>.

¹⁸⁸⁵ Isac, G., National environmental monitoring system in Romania. p. 18.

¹⁸⁸⁶ Ibid., p. 23.

¹⁸⁸⁷ Source: National Administration “Romanian Waters,” translated from Romanian from www.rowater.ro.

¹⁸⁸⁸ The original text is available at www.crucearosi.ro/uploads/Legislatie/Hotarare%202288%20din%202004%20-%20functii%20de%20sprijin.pdf. The names of several ministries were changed accordingly in the current (end 2014) Government.

- Environmental monitoring: Ministry of Environment and Climate Change;
- Seismic hazard monitoring: National Institute for Earth Physics (INCDFP) and National Institute for Research & Development in Construction;
- Monitoring of hydrological phenomena on watercourses and quality their waters: Ministry of Environment and Climate Change through National Administration “Romanian Waters”;
- Monitoring the main hydraulic works: the Hydro administrator, Ministry of Environment and Climate Change and the Ministry of Economy;
- Monitoring dangerous weather phenomena: Ministry of Environment and Climate Change, National Meteorological Administration;
- Public health monitoring: Ministry of Health;
- Monitoring shipments of hazardous chemicals: Ministry of Transport;
- Monitoring of sources of nuclear and radiological risks: National Commission for Nuclear Activities through the Nuclear Agency & Radioactive Waste;
- Monitoring of nuclear activities and transport of nuclear fuel and radioactive material: National Commission for Nuclear Activities;
- Hazard monitoring of special nuclear research and development facilities: Ministry of National Education;
- Monitoring of safety construction: State Construction Inspectorate;
- Monitoring of economic sources of chemical risks: Ministry of Environment and Climate Change, Ministry of Internal Affairs, the Ministry of Economy and the National Dangerous Chemical Substances Authority;
- Monitoring of the economic sources of risks of fire and explosion: Ministry of Internal Affairs and Ministry of Economy;
- Monitoring shipments of military explosives: Ministry of Defence;
- Monitoring of sources of risks of military explosions: Ministry of Defence;
- Hazard and risk monitoring signalled externally: Ministry of Foreign Affairs through the Crisis Operation Centre;
- Hazard monitoring for communications networks and information: Ministry of Communications and Information Technology, Special Telecommunications Service and the National Regulatory Authority for Communications;
- Monitoring of critical infrastructure security: the ministerial committees for emergency situation;
- Monitoring of food safety: National Sanitary, Veterinary and Food Safety Agency.

Analysis

Analytical work on threats assessment and risks identification is organised in two areas – natural hazards and technological risks. It is based on List of methods/procedures for fire risk assessment approved by the General Inspectorate for Emergency Situations.¹⁸⁸⁹

A Methodology for Risk Analysis Involving Industrial Hazardous Substances (in Romanian language, “Metodologie pentru analiza riscurilor industriale ce implică substanțe periculoase”)¹⁸⁹⁰ has been

¹⁸⁸⁹ Available in Romanian language at http://www.igsu.ro/documente/metode_avizate_risc_incendiu_02.06.2011.pdf.

introduced for risk analysis in the technological domain. It has been developed in accordance to the Directive 96/82/EC, the so-called Seveso II, and Directive 2003/105/EC, amending the latter. In Romania, Seveso II applies to several thousands of industrial establishments where a number of dangerous substances exceed the thresholds, established by the Directive. The authorities, responsible for the implementation of Seveso II, are:

- At the national level: the Ministry of Environment and Climate Change, National Environmental Protection Agency, the General Inspectorate for Emergency Situations, and the National Environmental Guard;
- At the regional level: Regional Directorates of the National Environmental Protection Agency and Regional Commissariat of National Environmental Guard;
- At the local level: Environmental Protection Agencies, County Inspectorates for Emergency Situations, and County Commissariat of National Environmental Guard.

There are number of checklists and assessment guides developed for the implementation of the Methodology for Risk Analysis Involving Industrial Hazardous Substances, as follows:

- Site inspection checklist for fertilisers;
- Checklist for inspection of activities of the mining industry;
- Checklist for inspection in refineries;
- Checklist for inspection of liquefied petroleum gas deposits;
- Assessment guide for external emergency plan;
- Implementation guide for Seveso spatial planning and urbanism;
- User rating for security reports.

According to the Government Ordinance No 2288/2004, Annex 2, chapter C, the risk assessment functions are dedicated to different ministries and state agencies in the following way:

- Mass illness: Ministry of Health/Directorate General for Public Health and the State Sanitary Inspection, National Centre for Surveillance and Control of Communicable Diseases and the National Veterinary Services and Food Safety;
- Epizootic diseases/zoonosis: Ministry of Agriculture and Rural Development and the National Sanitary, Veterinary and Food Safety Authority, in collaboration with the Ministry of Health;
- Failure cosmic objects: Ministry of Education and Research/Romanian Space Agency, Ministry of Internal Affairs, Ministry of Defence;
- Collapse of land caused by mine explosions: the Ministry of Economy and administrators of geological exploitation;
- Collapse of land in urban areas: Ministry of Transport, Ministry of Internal Affairs/local government;
- Landslides: Ministry of Internal Affairs/National Agency of Cadastre and Land Registration and the Ministry of Transport;
- Biological threat: Ministry of Health and the National Sanitary Veterinary and Food Safety Authority;
- Ecological threats: Ministry of Defence and Ministry of Environment and Climate Change;

¹⁸⁹⁰ Available in Romanian language at www.igsu.ro/documente/seveso/Metodologie_analiza_risc_final.pdf.

- Threats to critical infrastructures: Ministry of Transport, Ministry of Communications and Information Technology, Ministry of Economy, Ministry of Environment and Climate Change, Ministry of Health, Special Telecommunications Service and the Protection and Guard Service.

The organisation for monitoring and analysis of hazards in Romania is comprehensive and covers all key sources of natural and industrial risks. A work for internal integration between different sub-systems based on modern telecommunications solutions is in progress. Implementation of the EU directives is advanced based on specialised EU funding. Cross-border and regional co-operation for early warning and analytical work has been established and is expanding.

1.2.3 Policy for Prevention

The policy of prevention at a national level is dedicated to a specialised structure of the General Inspectorate for Emergency Situations, entitled "Prevention Inspection" and led by a Deputy Inspector General. Its objectives include:

- *Ensuring compliance with normative acts and other regulations on fire safety and civil protection;*
- *Identification, evaluation and analysis of potential hazards by assessing the probability of their occurrence and the consequences they entail for human life, environment and property;*
- *Risk awareness by exchanging information between different institutions, policy-makers, and other stakeholders and actors interested and/or involved in civil protection;*
- *Public information on potential risks.*¹⁸⁹¹

The main forms of prevention include drafting and approval of specialised regulations, authorisation of measures and preventive activities, providing of a specialised technical assistance, sharing of preventative information with the national and local authorities, agencies, stakeholders and the public. A special attention is paid on the timely and relevant preparation of the population, business and authorities for emergencies. Performing a strict control for violation of emergency related legal provisions is also seen as an instrument of prevention.¹⁸⁹²

1.2.4 Policy for Preparedness

The policy for preparedness to cope with civil emergencies is comprehensive and includes three domains: pre-disaster research, monitoring and analysis of hazards and risks, planning for emergency response, and organising of professional, voluntary and business capabilities.

The primary objective within the pre-disaster research, monitoring and analysis of hazards and risks is their identification by character and area of possible exploration, monitoring of those sources and analysis of their escalation in time and scope. This work results in drafting and implementing of specially funded programmes and plans for risks mitigation and in building and maintaining of a nation-wide early warning and alert system.

Based on hazards and risks analyses operational plans are drafted that reflect hypothetical scenarios for different hazards, including combined of different types and of mixed natural-technological character. Their primary objective is to provide relevant and timely preparation of the population,

¹⁸⁹¹ Source: http://www.igsu.ro/index.php?pagina=prevenire_generalitati.

¹⁸⁹² Ibid.

institutions, infrastructure, and specialised units for disaster response with emphasis on the organising, equipping and training of professional and volunteer crisis response units. Planning is done for each county and the capital city of Bucharest, for each town, as well as for public and educational institutions and businesses.

Organising and training of professional, voluntary and business capabilities is aimed to maintaining a strong, reliable, and sufficient quantity of prepared people and resources in size and scope relevant to the risks assessments. Training is provided in a formal framework for the professional institutions; non-formal seminars, workshops, round tables for a large number of participants; and informal – through different media and public happenings.

An important aspect of the policy for preparedness is the systematic improvement of the crisis management related legislation, including further transposing of the relevant EU Directives.

1.2.5 Policy for Response

The National Strategy on Civil Protection determines the overall policy for response in cases of emergencies (also in cases of an armed conflict). The policy is aimed to maximum limit the surprise throughout the population and authorities, implementing measures to protect people and property and limiting the effects of disasters (also air attacks and military actions) on people, animals, and infrastructure.

According to the Strategy on Civil Protection, the policy of response is based on three mutually reinforcing components: alarming, updating of planning, and response operations:

- The timely and effective alarming of the population and authorities is seen as a key factor for relevant response operations.
- Reviewing and updating the deliberate plans and taking protective measures to limit the scope of the danger and damages is the national and local authorities primary aim.
- The timely deployment and intensive conduct of information-based operations by the specialised formations, specialists and volunteers to protect the lives of the people and important infrastructure are seen as core functions of the overall civil protection policy. Evacuation of people, animals and other valuable material goods out of danger zones, providing shelters, immediate medical treatment and other life-support are operational priorities.
- Following the developments on the field, a further raising the capacity for crisis response by forces and means through mobilisation, outreach and making requisitions is expected.
- Policy also includes sharing information, analysis and assessments with neighbouring countries and international organisations as well as requesting of international support in case of a need.¹⁸⁹³

1.2.6 Policy for Relief and Recovery

The policy for relief and recovery is formulated as “post-disaster measures and activities,”¹⁸⁹⁴ which are organised and performed in short-, medium- and long-term frameworks to include:

¹⁸⁹³ Source: the Government of Romania, *National Strategy on Civil Protection* (Published in Official Gazette no. 600 of 12 July 2005). Available in Romanian language at www.igsu.ro/documente/legislatie/HOTARARE_Nr_547.pdf.

¹⁸⁹⁴ Ibid, National Strategy on Civil Protection, p. 8.

- The short-term civil protection measures include continued search and rescue operations, improvement of the situational awareness about the losses and damages, caused by the disaster, drawing analysis and recommendations for further actions and measures, taking measures for immediate support of the people in need, improving the quality of measures, taken during the period of rapid response, and maintaining the cross-regional and cross-border co-ordination and support.¹⁸⁹⁵
- In a mid-term timeframe, the focus is on restoration of the vital social, economic and security functions within the damaged areas and throughout the country, creation of normal living conditions for the population, including through collection, storage and equitable distribution of essential national and foreign humanitarian aid, restoration of the main elements of affected infrastructure and utilities management.¹⁸⁹⁶
- In a long-term perspective, measures and actions will continue to provide support to the affected population, removing the effects of disasters and helping to resume the normal economic and social activities, eventual relocation of evacuated population, restoration of civil protection assets, materials and funds used in response actions.¹⁸⁹⁷

Addressing the overall challenge of disaster prevention, mitigation and response require a comprehensive approach to the continuum of disaster risk assessment, forecast, prevention, preparedness and mitigation (pre- and post-disaster), bringing together the different policies, instruments and services available to the state, regional and local authorities. In Romania, most of the important components exist, but their integration and optimisation into a real modern and effective “system” yet to happen. Some Romanian authors (e.g., Zulean, Prelipcean, 2012; Tanislav, 2009) believe that the existing links between civil protection and environmental policies should be reinforced in order to take full advantage of the preventive measures included in environmental legislation and ensure an integrated approach to disaster prevention and mitigation.

1.3 Financing

In accordance with the National Strategy on Civil Protection (2005), funds should be allocated primarily to programmes that ensure the efficient and cost-effective crisis management. A second priority has been determined to be the balanced structure of the budget – the target being the average in NATO countries allocation of resources – 40% for personnel, 35-40% for investments, and 25-20% for operations and maintenance, to be achieved around 2008. The strategy also declares that the period 2008-2012 shall be dedicated to a modernisation of the equipment and training for crisis management interventions.¹⁸⁹⁸

1.3.1 Investing in preparedness

To achieve the strategy’s aims, the ministries, and the local and central public authorities are forced by law to provide funds for prevention and mitigation of disaster effects. According to Emergency Ordinance No 21/15.04.2004, the National Committee has the main duty to examine and propose to the Government for approval a national plan for ensuring human, material and financial resources

¹⁸⁹⁵

Ibid.

¹⁸⁹⁶

Ibid.

¹⁸⁹⁷

Ibid, p. 9.

¹⁸⁹⁸

We were not able to find more recent information on the achievement of those goals.

for the purposes of emergency management, elaborated by the General Inspectorate for Emergency Situations. Further, the Committee proposes to the Government the inclusion of funds in the annual state budget, necessary for emergency management.

In accordance with Public Financial Law no.500/2002, the state budget includes the Government's Intervention Fund, which is allocated, on the basis of Government decisions, for financing emergency actions with the view of eliminating disaster effects and supporting the individuals suffering from calamity.

Local and county councils, within their own budgets, must secure the necessary funds for intervention and prevention of disasters for the purposes of limiting and mitigating the disasters' consequences. In special cases, e.g. state of emergency, according to the law, there is a possibility of making requisitions of technical means and materials necessary for intervention. Perishable items and goods that can be used only once can be made requisite, according to the law, by paying a certain amount of money as compensation.

In addition to that, the annual budget of the Ministry of the Environment and Climate Change may contain funds for works for flood protection, as well as for repair of protection facilities damaged during the previous year. Through the annual budget of Ministry of Transport, funds may be allocated for multi-floor inhabited buildings' strengthening, if they are classified as being most exposed to seismic risk and thus represent a public danger.

Within the National Progress Report on the Implementation of Hyogo Framework for action for the periods 2011-13 and 2013-15,¹⁸⁹⁹ Romania has been asked to provide information on "the ratio of the budget allocation to risk reduction versus disaster relief and reconstruction." The answer includes the following information:

Table 17: Dedicated resources to implement disaster risk reduction activities in 2011-13 and 2013-15.¹⁹⁰⁰

Source:	Ratio: Risk reduction/Prevention (%)		Risk reduction/Relief and reconstruction (%)	
	2011-13	2013-15	2011-13	2013-15
National Budget	0.002	0.0158	N/A	N/A
Decentralised/sub-national budgets	1	0.003	2.5	0.002
USD allocated to hazard proofing sectoral development investments (e.g. transport, agriculture, infrastructure)	N/A	N/A	N/A	N/A

The 2011 report makes the following description:

Important amounts of money were invested in prevention activities and in disaster risk reduction measures, especially in the flood risk field. These funds are from the local councils, decentralized public services, central authorities and European programs. The investments in

¹⁸⁹⁹ Ibid. National Progress Report on the Implementation of Hyogo Framework for action 2011-13 and 2013-15.

¹⁹⁰⁰ National Progress Report on the Implementation of Hyogo Framework for action for the periods 2011-13 and 2013-15.

disaster risk reduction made by central authorities are easily identified (hydrotechnical works, hazard and risk maps, the program for the reduction of seismic risk of the buildings).

*At the local level, there are also current investments in disaster risk reduction (capacity building of the local emergency situations services, public awareness campaigns, the maintenance of ditches and dikes), investments covered by the emergency situations dedicated funds. These funds are dedicated for all prevention, response and recovery actions. Local authorities spend 0-4% of the local budget for disaster risk reduction measures and 0-10% for response and recovery, depending on the existing situation.*¹⁹⁰¹

Two years later, the report concluded that “Institutional commitments [were] attained, but achievements are neither comprehensive nor substantial.”¹⁹⁰²

1.3.2 Investing in consequence management

According to the World Bank, an important criterion for disaster consequence management is the insurance penetration, defined as insurance premiums as a percentage of the Gross Domestic Income (GDI). Non-life insurance (which consists mostly of property and automobile insurance) penetration is one of the criteria used to illustrate the ability of a particular society (not a state) to recover from heavy damages as of natural or man-made sources. However, specific data of catastrophic risk insurance in Romania are not available. This makes it difficult to explore the role of catastrophic insurance in financing natural disaster recovery. With these limitations, The World Bank has classified Romania as a mid-level country in terms of both GDI and non-life insurance penetration.

As part of the reforms in disaster management sector, initiated after 2004, Romania has introduced catastrophe-related insurance by adopting Law no. 260/2008, in force since 2009, on compulsory house insurance against earthquakes, landslides and floods, amended by Law no. 248/2010 (actually, in Romania there are only two compulsory insurances: the compulsory motor liability insurance and the compulsory home insurance, reflected in Figure 1). This law regulates:

- The terms and conditions of compulsory insurance for dwelling owned by individual legal entities;
- Relations between parties, their rights and obligations;
- The setting up, aims, goals, responsibilities, status, organisation and operations of the National Disaster Insurance Pool (PAID – Pool de Asigurare Impotriva Dezastelor Naturale).

Established according to the law, the Romanian catastrophic insurance scheme works the following way:

- Perils covered: earthquake, flood, and landslide;
- Property covered: dwellings only (both public and private), in accordance with the category of construction;
- Not covered: outbuildings, appurtenances, contents, temporary accommodation;
- Basis of loss: replacement cost or repair;
- Sum insured or limit of cover: EUR 20 000 or 10 000.¹⁹⁰³

¹⁹⁰¹ Ibid., National Progress Report on the Implementation of Hyogo Framework for action 2011-13, p. 6.

¹⁹⁰² Ibid., National Progress Report on the Implementation of Hyogo Framework for action 2013-15, p. 5.

¹⁹⁰³ Source: prof. Dumitru G. Badea, Chairman and CEO of the Romanian Insurance Institute.

Potential beneficiaries of PAID are about 8.4 million homeowners. Under pressure by the insurance business, some amendments to the law were introduced in 2010: homeowners who have bought a volunteer insurance policy are excluded from the obligation to buy a compulsory one. The major problems related to recovery funding are:


- The current legislation, which mixes volunteer products with compulsory policy, as the latter cannot compete with volunteer products (sum insured is four times higher);
- Poor financial education;
- Low level of insurance culture.

International aid

The European Union Solidarity Fund (EUSF) was set up to respond to major natural disasters and express European solidarity to disaster-stricken regions within Europe. The Fund was created as a reaction to the severe floods in Central Europe in the summer of 2002. Table 8 below¹⁹⁰⁴ provides information on the EU support for the disaster recovery during the last decade.

Disaster Relief Emergency Fund (DREF) of the International Federation of Red Cross and Red Crescent (IFRC) is also providing funds for disaster recovery to the country. After heavy floods in 2013, DREF has provided CHF 185,736 to support the Romanian Red Cross Society in delivering

Table 18. EU Solidarity Fund for Romania.

18		April 2005	Spring Floods	major	489	18.8	110.5
		July 2005	Summer Floods	major	1 050	52.4	
		July 2008	Floods	regional	471	11.8	
		June 2010	Floods	major	876	25.0	
		August 2012	Drought & Fires	(major) ¹	807	2.5	

immediate assistance to some 900 families (3,600 beneficiaries), mobilising its branches in the affected territories and with the help of other stakeholders.¹⁹⁰⁵

The reviewed independent and academic studies agreed that despite declared priority, disaster management in Romania has not received special funding recently. There are specifically allocated funds for disaster management within the state budget and the local budgets. When needed, these can be supplemented by reallocating funds within the state budget by governmental decree, using resources from the so-called Intervention Fund. However, dedicated funding and resources are sometimes used in higher-priority areas, due to financial constraints.

Recent Romanian achievements in the areas of prevention, preparation, mitigation and risk reduction everything has been financed via the budgets of various ministries. Such practice is met often in South-Eastern Europe. However, the quoted studies underline that it could be successful only if investments are based on a well co-ordinated and properly managed a government-level national plan. The established in Romania mechanism for crisis management, led by the Government through the National Committee for Emergency Situations and administrated by the GIES, may provide such consolidation of efforts.

¹⁹⁰⁴ Data from EU Commission, Regional policy, available at http://ec.europa.eu/regional_policy/thefunds/solidarity/index_en.cfm.

¹⁹⁰⁵ IFRC.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Post-crisis impact assessment involves a systematic analysis of socio-economic and environment losses and impact, along with reports that contain the disaster effects mitigation measures that were taken and also the measures that will be implemented to prevent that kind of situations. Those reports are presented to the Government and mass media and can be consulted by every interested person or institution.

The physical preliminary evaluation and the value disaster effects evaluation are a permanent care of the Romanian emergency management body, aiming to realise some urgent operative measures and also medium- and long-term rehabilitation and reconstruction measures in order to normalise the social-economic activities and to promote the long-lasting objectives.

At a local level, there are consequences evaluation commissions that use a specific methodology for estimation of the losses, to ensure compensations and provide necessary funds for situation normalisation. In cases of disasters with major consequences, governmental commissions are responsible for the assessment of the impact, sometimes involving cooperation with international experts.

1.4.2 Departmental lessons learned systems

Each civil protection institution is doing lessons learned for itself and reports to the central authority. For example, in its report on the floods in 2010, the GIES has focused on the following recommendations:

- To launch a major project for improvement of the flood prevention and protection in the upstream of Prut and Siret rivers;
- To build a system with automatic water level monitoring stations;
- To improve the level of preparedness of the local authorities;
- To strengthen cooperation with neighbouring countries;
- To improve the national disaster damage assessment regulations;
- To speed up the process of drawing up the risks maps according to the Flood Directive 2007/60/EC;
- To develop guidelines on the management of emergency situations generated by floods, dangerous meteorological phenomena, and hydro-technical accidents, and accidental pollutions (on rivers and sea shore);
- Romania to apply for support from the European Union Solidarity Fund.¹⁹⁰⁶

1.4.3 Centralised (national) lessons learned system

A specialised lessons learned-unit has not been established yet.

¹⁹⁰⁶ Presentation of the report is available at www.igsu.ro/documente/SAEARI/ROMANIA_Floods_2010.pdf.

1.4.4 International exchange for lessons learned

The General Inspectorate for Emergency Situations is the national contact point in relations with the specialised international organisations such as:

- Monitoring and Information Centre – MIC / Community Civil Protection Mechanism;
- Euro-Atlantic Disaster Response Coordination / NATO / EADRCC;
- Office of Coordination of Humanitarian Affairs / UNOCHA;
- Consultative Group on International Search and Rescue - INSARAG focal point.¹⁹⁰⁷

At a regional basis, exchange of lessons is provided mostly within the Initiative for Disaster Prevention and Preparedness in South Eastern Europe (DPPI SEE) within the Regional Cooperation Council.¹⁹⁰⁸

1.4.5 Regular policy reviews

Disaster management policy is not yet a subject of overall periodical reviews. As the ANVIL Project Deliverable 2.1 pointed out, “Published evaluations of the efficiency and effectiveness of Romanian civil security system are limited, but there are however a few reports on the major floods available.”¹⁹⁰⁹ Reporting mechanism includes mostly two types of documents: ministerial reports and inter-institutional reports.

The ministries that have legal obligations to monitor and lead the disaster response produce ministerial reports. They are post-factum and provide information mostly on the causes for the disaster and on “who-did-what.” Causes usually explain the connection between the specific natural phenomena and the man-made preconditions for disastrous consequences (as deforestation, wasting of watercourses, illegal house construction in landslide areas, etc.). The criterion for doing the right is based on instructions and guidance. Having these, ministries make their own assessment of the damage and draw conclusions on the organisation and performance of emergency management mechanism.

The inter-ministerial commissions have produced most of the policy review reports. Commissions are established depending on the type and scope of the situation under the supervision of the National Committee for Emergency Situations. The focus of these commissions is on circumstances, causes, interventions and comprehensive impact of emergencies. Reports include recommendations for improving the overall National Emergency Management System, including legal, organisational and capabilities aspects.

In any case, the reports are directed to the General Inspectorate for Emergency Situations and respectively, to the Minister of Internal Affairs. The latter presents a summary of the assessments and the recommendations to the National Committee for Emergency Situations, providing also a draft committee decision. Depending on the case, the abovementioned two bodies decide in what degree and format the post-emergency reports, conclusions and recommendations will be made publicly available.¹⁹¹⁰

¹⁹⁰⁷ Source: GIES web-site, http://www.igsu.ro/index.php?pagina=cooperare_internationala.

¹⁹⁰⁸ See <http://www.dppei.info/>.

¹⁹⁰⁹ ANVIL – Analysis of Civil Security Systems in Europe, Deliverable 2.1. p. 872. Available at http://anvil-project.net/wp-content/uploads/2014/01/Deliverable_2.1.pdf.

¹⁹¹⁰ However, there is no evidence that this mechanism has been followed throughout each emergency.

Non-governmental organisations such as the Red Cross also make post-disaster reports, which are focused mostly on damages and needs than on policy, performance and organisation.¹⁹¹¹ Caritas Romania Confederation has focused its work on community level of risk reduction and disaster preparedness.¹⁹¹²

Within the framework of different international projects, a variety of international organisations (UN, EU, The World Bank) and countries (Japan, Norway) have compiled or sponsored studies and produced reports on major aspects of the Romanian emergency management policy, organisation and practice. These are usually self-assessment reports or field studies. As a rule, they propose specific policy recommendations in different time perspectives:

- The ANVIL Project has made an assessment of the Romanian crisis management capacity from the point of view of “civil security”, focusing on three criteria: legitimacy, effectiveness, and efficiency. However, the project has produced “key findings” but did not draw policy recommendations.
- National progress reports on the implementation of the Hyogo Framework for Action (HFA) are based on self-declared strategic goals for a two-year period and a self-assessment sheet for the previous two years (the last report available is for the period 2011-2013¹⁹¹³). An example of the way these reports may contribute to policy improvement is the following assessment and recommendation: “The legislation concerning the management of emergency situations (crisis management) is put in place, each central and local authority having specific responsibilities on this issue. On the other hand, risk management is focused more on disaster prevention and mitigation rather than on risk reduction as a whole.”¹⁹¹⁴
- In 2007 the United Nations International Strategy for Disaster Reduction (UNISDR), within the context of the Global Facility for Disaster Reduction and Recovery (GFDRR) awarded a consultancy project to prepare a report of the risk assessment of the South East European countries. The Report analyses the risks from both vertical (country), and horizontal perspectives (SEE sub-region level) emphasising the trans-boundary disaster risks and their effects. Risk assessment of all the member countries is prepared along with addressing the country level and regional issues and area of cooperation. The report concludes with recommendations that are general for all SEE countries; for example: “The system must ensure a very close working relationship between the policy formulating body, the committee within the ministry responsible for national disaster management, and the operational agency/s that implement the decisions.”¹⁹¹⁵
- Another UN – World Bank sponsored regional crisis management study has been undertaken within the scope of the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP), in cooperation with a number of international and regional partners, including the European Commission. The study focused on four issues: legislation, organisation, funding, and societal engagement. An example from the policy

¹⁹¹¹ For an example see http://reliefweb.int/sites/reliefweb.int/files/resources/887A8506CBD450748525775A006709DD-Full_Report.pdf.

¹⁹¹² The book is available at <http://www.caritas.org.ro/CARITASfiles/DRRBook/612%20Disaster%20Risk%20Reduction.pdf>.

¹⁹¹³ An HFA Monitor update published by Prevention Web www.preventionweb.net/english/countries/europe/rou/.

¹⁹¹⁴ Ibid., p. 6.

¹⁹¹⁵ Final report is available at http://www.preventionweb.net/files/2695_SEEDRMI.pdf. Quoted text at p. 78.

recommendation is; “Furthermore, risk assessment procedures are reasonably well established, although further development could enhance the ability to cope with potential future hazard scenarios, especially those related to climate change.”¹⁹¹⁶

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1.5 Resilience

The concept of resilience is not an explicit component of the Romanian civil security policy. However, considering that resilience is the capacity of a state, society and communities to cope with the challenges of different hazards by changing or resisting in order to reach and maintain acceptable levels of functioning and structure, in Romania many activities have been initiated and measures have been taken to reduce the vulnerability of the country to the risk of disasters. Since 2004, different governments have taken the resilience approach, particularly in the enforcement of certain regulations. Romania is one of the South-Eastern European countries with a recognised success in the systematic incorporation of standards regarding the building and infrastructure codes.

As resilience is also the capacity of a community to grow through disasters, it is partially determined by the degree to which the social system is capable of organising itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures. Across the efforts, undertaken while reforming the civil protection service in Romania, one may identify some core elements that actually build-up on the ground of resilience as:

- Reducing the most dangerous vulnerabilities through improving legislation, investing in preparedness and monitoring, developing a relevant alerting system and building intervention capabilities.
- Mitigating the impact of natural and man-made situations applying protective standards in the construction of housing and critical infrastructure, implementing new insurance policy and culture, maintaining a rapid reaction capacity and reserve materials.
- Improving the education and training at all levels and developing towards knowledge based disaster management.

During the decade after 2004, Romania has been very active reforming inherited ineffective civil protection service using the paradigm of resilience: to addresses the loss of life, property and economic productivity caused by weather extremes and other natural hazards in the context of the implementation of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. To that end, Romania has three focus areas:

- Hydrometeorological forecasting, data sharing and early warning;
- Coordination of disaster mitigation, preparedness and response; and
- Financing of disaster losses, reconstruction and recovery, and disaster risk transfer (disaster insurance).

The resilience concept, as part of the national civil protection policy, has been already realised through non-structural channels such as urban planning and building codes. According to the UN study, “[r]isk maps are being developed covering every locality considered to be in a risk area to chart the risks posed by hazards including floods, earthquakes and landslides. The maps identify hazards and populations at risk and include information about measures needed to prevent disasters

¹⁹¹⁶

Report is available at http://www.unisdr.org/files/9346_Europe.pdf. Quoted text at p. 156.

caused by natural or technological hazards. The maps will be accessible by all interested parties and will be included in urban development plans to manage building and land use” (UNISDIR, 2008, p. 156).

Regarding standardisation, starting on 31 October 1998, the Romanian Standards Association (ASRO, Asociația de Standardizare din România) has taken over the position of a specialised private body of public interest on standardisation issues. It is a not-for-profit association, authorised by the Government, replacing, in this respect, the former Romanian Standards Institute. In conformity with Law 355/2002, the Romanian Government granted ASRO governmental recognition as a National Standardisation Body for standardisation in all aspects of European and international standardisation. The association represents Romania in the international standardisation process by coordinating the national input, organising delivery of information on standards and providing a wide range of services both for the distribution of standards and for accredited certification activities. It also issues (in printed form and on electronic media) various publications and performs training courses. ASRO members represent the industry, the economy, the research and development area, consumers, national authorities, university media, certification bodies and various other stakeholders, all standards users and developers.

There is no available information for the implementation of ISO/TC 223 Societal Security in the country’s overall crisis management system. ASRO plan for 2014 does not envisage issues, related to crisis management, to be standardised.

1.6 Information sharing and data protection

Romanian disaster management concept and practice are based on, among other things, the understanding that efficient flow of information ensures a permanent connection with the National Emergency Management system’s objectives. The constitutionally guaranteed access to information is the grounds to improve the education and knowledge of hazards and crisis management, and this way, to further improve the culture of safety and resilience.

The National Strategy on Civil Protection determines that the success of civil protection depends primarily on the amount and quality of information. The Strategy also governs that one of the primary strategic missions is the collection and processing of data and information for any controlled parameters that go beyond the determined limits. However, the document does not specify how the sharing of information should happen.

Without being explicitly regulated, information about hazards and emergencies is viewed as preventive and operational. The legislation on civil protection (Law 481/2004) uses two terms regarding the delivery of information:

- Notification – an authorised transmission of information about impending or occurrence of disaster and/or armed conflict by central or local public administration authorities, as appropriate, in order to avoid surprise and the achievement of protection measures;
- Warning – providing the population with necessary information about impending or occurrence of disasters. (Art. 9, (1), c), and d))

In addition, Article 3, (1), b) from Law No 481/2004 determines that among the civil protection attributions are the collection, processing, storage, study and analysis of data and information on civil protection.

The information on hazards and emergencies is co-ordinated nationally by the Ministry of Internal Affairs and delivered through the General Inspectorate for Emergency Situations (GIES). According to the GIES, “[p]reventive information consists of all the actions and measures that ensure:

- Citizens’ awareness of the risks that could expose you to a certain time and a certain place, and on protective measures and behaviour should adopt in the event of an emergency;
- Educating citizens on how their alarm and permanent information in case of an emergency.”¹⁹¹⁷

The flow of information for decision-making and operational command and control is presented in Figure 8. During emergencies, operational information is aimed at clarification of the situation, analysis of the necessary measures, adaptation of contingency plans, warning (including internationally), and decision-making.

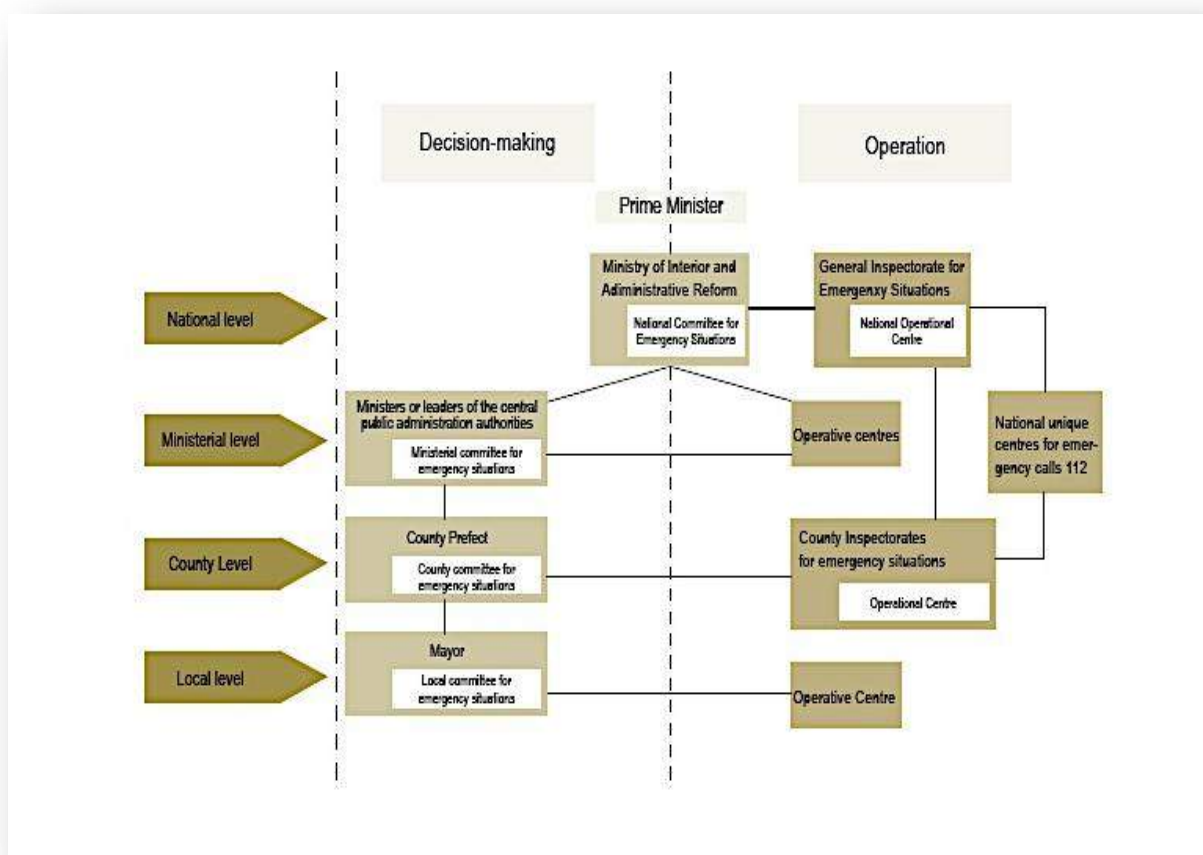


Figure 18: Flow of information in the Romanian National Emergency Management System.¹⁹¹⁸

¹⁹¹⁷ Source: GIES web site available at http://www.igsu.ro/index.php?pagina=informare_preventiva.

¹⁹¹⁸ Source: UNISDIR, WB, 2008.

2 Legislation

Generally, the Romanian legal system belongs to the “civil law model,” under which only the Constitution and other statutory legislation constitute a legitimate source of legal rules. It does not recognise case law or judicial precedent as a source of legal rules. Previously decided cases, therefore, are not binding upon lower courts and do not create “a law.”

2.1 Crisis (emergency, disaster) management concept

The key conceptual document at the strategic level crisis management in Romania is the National Strategy on Civil Protection. It has been approved by the Government on 9 June 2005 and published in Official Gazette No 600 of 12 July 2005.

An important characteristic of the strategy is that it integrates civil (security) protection and traditional civil defence into one package. Among others, that determines a role of the military throughout the entire “peace-crisis-war” continuum. The civil protection tasking is done for:

- Peacetime (in terms of normality or of disasters that do not require the declaration of emergency);
- Crisis situations caused by disasters and declaration of state of emergency;
- Time of war.

The strategy determines four pillars of civil protection in Romania: credible response capability, restructuring and modernisation, enhanced operational partnership and gradual integration with EU and NATO (in terms of crisis management).

- Credible response capability. The concept is based on the understanding that the national civil protection in Romania must be permanently maintained in order to be able to respond effectively and appropriately to any escalating natural and technological risk or military threat. The response will be provided in two phases: pre-disaster actions and measures (in peacetime) and post-disaster measures and actions (over the short, medium and long term).
- Restructuring and Modernisation. The number of risks and scope of dangers they pose to Romania require that, in the future, forces and means emergency structures to grow in terms of efficiency and specialisation. Sizing and equipping them will depend on financial resources that the central and local government would be able to dedicate to civil protection. To strengthen the capacity of uniformed organisations, the central and local authorities support the establishment of volunteer formations.
- Enhanced operational partnership. Partnerships are seen as the best way to prepare civil protection structures in Romania to integrate into the collective security. It will amplify the dynamics of civil protection structures of other NATO and EU member states. In bilateral and multilateral cooperation, the civil protection structures of Romania participate in group exercises, joint forces and multinational operations for humanitarian assistance.
- Gradual integration.¹⁹¹⁹ Integration of Romania in NATO and EU is seen as a core factor for national security, including in civil protection context. Focus of international co-operations is placed also on OSCE and integration into the International Organisation of Civil Protection

¹⁹¹⁹ The National Civil Protection Strategy has been approved before Romania joined EU.

(ICPO).

The concept of civil protection has a comprehensive scope, but relatively short inwardness. Obviously, it suffers from the lack of relevant interpretation of modern civil protection practices and benchmarks. The inclusion of both peace and war time situations into one concept does not serve to the higher efficiency of its civil security component and keeps the over-centralised management, inherited from the past.

In September 2010, in the aftermath of the heavy floods in 2007, the National Strategy for the Management of the Flood Risk was adopted.¹⁹²⁰ This strategy address issues such as integrated management of the water sources, land management and urban development, environment protection including forestry and agriculture, protection of the transport infrastructure, tourist areas, and individual protection.¹⁹²¹

2.2 General crisis (emergency, disaster) management law

The legislative set concerning civil protection in Romania has been established and gradually improved over the last decades, beginning with the aftermath of the catastrophic earthquake in 1997, when one of the lessons learned was the need of having professional civil emergency personnel and organisation at the national and local level.

By way of background, Law No 2/1978 on civil defence assigned its organisation to the Ministry of Defence (a typical solution for the Warsaw Pact countries for that time) and led by Commandment of Civilian Defence. (Zulean, Prelipcean, 2012) In 1990, Romania ratified the additional First and Second Protocols of the Geneva Convention (1949), which provided a framework for further improvement of the civil protection service. The Constitution as of 1991 regulated the state of emergency in very broad terms without making a distinction between different causes and forms – military, social unrest, ethnic clashes, natural disasters, technological catastrophes, environmental accidents, etc. During the 90s, in parallel with the first military reforms, civil protection gradually moved away from its military frame and wartime core. With the introduction of the Law of National Defence No 45/1994, “civil defence” was transformed into “civil protection.” Two years later, the Romanian Parliament passed the Law on Civil Protection No 106/1996, setting the responsibilities of the personnel in charge to this purpose of that matter and providing guidance to civil protection operations in case of emergency.

The latter organisation was used until the socio-political clashes of 1999. The coal miners’ attempt to through down the government triggered the establishment of a new law enforcement mechanism. The Government’s Emergency Ordinance No 1/1999 laid down regulations on declaring a state of siege and emergency on the territory of the country. Furthermore, through series of legal acts adopted between 1999 and 2002 the crisis management system received a civil security focus, becoming more decentralised, and professional. In this way, the course of the evolution of national security and civil protection is from “war – civil defence” dominance towards priority on “civil security – crisis management”.

With any natural disaster and major industrial accident, lessons have been learned and legislation improved. A variety of factors, mostly the floods and the prospect of NATO membership in 2004, have generated political will for comprehensive and quick legal regulation and development of an

¹⁹²⁰ Available in Romanian language at http://www.rowater.ro/dacrisuri/Documente%20Repository/Legislatie/gospodarirea%20apelor/strategia_nationala_de_management_al_riscului_la_inundatii.pdf.

¹⁹²¹ GIES presentation, available at http://www.igsu.ro/documente/SAEARI/ROMANIA_Floods_2010.pdf.

improved civil protection system. The first major step forward was the Government Emergency Ordinance No 21/2004 that set up the National System for Emergency Situations Management. Its first principle was formulated as “prevention and anticipation,” while the newly established National Committee for Emergency was made responsible to the Government for drafting the National Plan for providing resources in case of emergency. (Zulean, Prelipcean, 2012) According to the ordinance, the emergency is an exceptional, non-military event, the intensity of which threatens the life and health of the population, the environment, and important material and cultural values. This formally moved civil protection away from the concept of civil defence and the dominance of the military over the civil security.

Several months later, a new *Law on Civil Protection* (No 481/2004) determined the civil protection situation as a situation caused by the imminence or occurrence of a disaster, military conflict and/or other unconventional situation. From an organisational perspective, the newly established General Inspectorate for Emergency Situations (GIES) was defined as a co-ordinating and executive body that serves under the National Committee for Emergency’s guidance. The *law on Civil Protection* (as amended in 2006 and 2008) represents the core civil security legislative act.¹⁹²² It stipulates that civil protection is a component of the national security that aims to prevent and reduce the risk of disasters, and to protect the public, property and environment from the negative effects of emergencies and armed conflicts. The *Law on a Health Reform* (2006) also pertaining to the organisation of the Romanian crisis management system. It sets up the mobile emergency rescue service, placed within the professional emergency services.

In 2006, the *Law on Health Reform* set up the mobile emergency service for resuscitation and extrication placed within the professional emergency services.

In 2008, a newly introduced Article 4 in the Law No 481/2004 regulated radiological, chemical and biological protection in cases of an emergency. Public institutions and operators that manufacture, transport, store or handle hazardous substances in such quantities that may endanger the life and health of the public must check for radioactive, chemical and biological contamination of raw materials and products, and when necessary, to decontaminate their personnel, lands, buildings and machinery. The decontamination should be performed according to technical regulations established by the respective ministries and approved by the General Inspectorate for Emergency Situations. Pollution control consists of specific measures for the identification and removal of polluting sources and includes evacuation, agricultural and consumption prohibitions. Operators and public authorities must warn the population immediately of any pollution or contamination

Currently, disaster management is addressed by various legislative documents and the work of various administrative authorities, public institutions, volunteers, and specialist bodies with responsibilities for disaster prevention, monitoring, and response (See “Resources”). Overall, according to some national experts and international assistance projects, the legislative base of civil protection in Romania seems to be comprehensive, but also too complicated, scattered and in some aspects is out-dated.

2.3 Emergency rule

The Constitution of Romania provides the basic legal framework for regulating extraordinary situations, determining that:

¹⁹²² Civil Protection Law No. 481 of 8 November 2004; a consolidated version of the law with all amendments since 2004 has been published in the Official Journal, Part I No. 554 of 22 July 2008.

Article 93 [Siege, Emergency]

(1) The President of Romania shall, according to the law, institute the state of siege or emergency in the whole or part of the country, and shall request Parliament approval of the measure thus adopted within five days from adoption.

*(2) If Parliament does not sit in a session, it shall be convened de jure within 48 hours from the institution of the state of siege or emergency, and shall function throughout this state.*¹⁹²³

Article 148 (3) further states, “The Constitution shall not be revised during a state of siege or emergency or at wartime.”¹⁹²⁴ Under the same paradigm, Article 89 (3) guarantees the role of Parliament during emergencies, stipulating that “Parliament cannot be dissolved during the last six months of the term of office of the President of Romania, nor can it be dissolved during a state of siege or emergency.”

The Constitution also determines that the legislation, concerning “the states of siege and emergency” are qualified as “organic.” (Art. 72, e) This means that the law on civil protection is among the fundamental legal acts in Romania.

The Article 114 stipulates that “(1) Parliament may pass a special law enabling the Government to issue orders in fields outside the scope of organic laws.” This text provides opportunity for additional legislation concerning the emergency and crisis management. Further, with respect to emergency, which may occur in an unexpected form and scale, the Constitution (Art. 114) permits that “(4) In exceptional cases, the Government may adopt emergency orders, which shall come into force only after their submission to Parliament for approval. If Parliament does not sit in a session, it shall obligatorily be convened.”

This legal framework provides for the institution of a state of siege or a state of emergency under Art. 93. Law no. 453 of 12 November 2004, modifying Government Emergency Ordinance no. 1/1999, detailing the elements of a state of emergency. It is to be instituted in cases where dangers to national defence and security or threats of calamities occur.

The President has the power to declare a state of emergency by decree, which will then be up for parliamentary approval. A state of emergency can end if Parliament does not approve it within five days of the issuance of the decree if Parliament decides that the danger has been removed ahead of term, or at the expiration date included in the presidential decree. It can also be prolonged by Parliament.

Law no. 453 clarifies the international law limits, which operate to restrict the state of emergency. These include the right to life (except when the death is the result of a lawful act of war), torture and inhuman and degrading treatment, punishment for offences not previously proscribed as such, and restrictions of the access to justice.¹⁹²⁵

Introduction of states of emergency can be applied in two forms, each designed for a different type of situation.

- Emergency situation (*Stare de alertă*): In case of a non-military combat situation, a prefect can enforce emergency. Roadblocks are enforced. Any utilitarian vehicle or equipment can

¹⁹²³ Constitution of Romania. Available at www.cdep.ro/pls/dic/site.page?den=act2_2&par1=3#t3c2s0sba93.

¹⁹²⁴ Ibid.

¹⁹²⁵ Source: Geneva Academy of International Humanitarian Law and Human Rights, available at http://www.geneva-academy.ch/RULAC/national_legislation.php?id_state=182.

be temporarily used by the state, without any restriction. Evacuation is not mandatory, unless extreme circumstances apply. Only emergency medical service, police and firefighting personnel are required to intervene. This situation can be enforced in case of natural disasters or civil unrest.

- State of emergency (*Stare de urgență*): Military can only be enforced by the President of Romania. The military becomes the upper form of control in the country (under the rule of the president). The civilian population is subject to strict regulations, imposed by the type of emergency. All private and public non-crucial activities are suspended. Essential services might be disrupted. This situation can be enforced in case of extreme circumstances, such as a war.

The declaration of an emergency represents an exceptional act, which allows the application of a series of political, economic and public order measures covering the entire territory (national level), or parts of the territory (country and local level). Emergency status can be declared when there exists a serious actual threat or imminent threat to national security or the functioning of democracy; or there exists an actual calamity or imminent threat of calamity, which requires prevention or mitigation activities.¹⁹²⁶

During an emergency, the National Committee for Emergency Situations manages intervention activities, which is directed by the Minister of Administration and Interior, while the Prime Minister explores oversight and co-ordination role.

The local police have also a legal opportunity to introduce “special security zone” (Zonă specială de siguranță publică) as an administrative measure in different situations with a public character that may (usually) turn into public unrest. This implies installation of road checkpoints and higher numbers in police and gendarmes/riot police presence, patrolling the area. There could be applied also a ban that restricts the right to travel for people in the area; any vehicle and individual transiting the zone are subject to screening.

The best known event in which the state of emergency has been enforced has been because of the 1977 Vrancea earthquake. The last instance in which the special zone of public safety has been enforced was on 8 December 2013 in Pungești and Vaslui, following popular unrest in Pungești triggered by Chevron’s plans to begin exploring shale gas in the village¹⁹²⁷ (Drilling has been cancelled in 2015¹⁹²⁸).

¹⁹²⁶ UNISDIR, WB, 2008.

¹⁹²⁷ Cf. Natural Gas Europe, available at www.naturalgaseurope.com/riot-police-special-security-zone-chevron-romania.

¹⁹²⁸ Source: <http://www.wsj.com/articles/chevron-to-give-up-romanian-shale-gas-interests-1424482388>.



Figure 19: Protesters against “special security zone” in Plungesti.¹⁹²⁹

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

The highest-level governmental interagency body with responsibilities for crisis management is the National Committee for Emergency Situations. It was established on the same day as the GIES by Decision no. 1489 of 9 September 2004, on the organisation and functioning of the National Committee for Emergency Situation.

The main executive agency for civil protection at the national level is the Ministry of Internal Affairs. It was established in its current format on 28 June 2003, by means of the Romanian Government Emergency Ordinance no. 63, which merged the Ministry of Interior and the Ministry of Public Administration.¹⁹³⁰ In the civil protection domain, the Ministry of Internal Affairs has the following functions:

- Drafting and implementing the national strategy on civil protection;
- Developing and updating of the action plan establishing the state of emergency and coordination of the uniform application of measures in a state of emergency by the military and civilian public authorities involved;
- Monitoring of the development of the situation, and proposing the extension of the operation or the restriction of the period of application of the state of emergency;
- Monitoring of the operational situation and proposing measures for the prevention and

¹⁹²⁹ Source: <http://www.naturalgaseurope.com/riot-police-special-security-zone-chevron-romania>.

¹⁹³⁰ Source: http://www.mai.gov.ro/engleza/index01_1.htm.

mitigation of the consequences of the crisis in the field of public order; and

- Operational management in case of crisis.

The highest-level state agency, focussed only on civil protection from natural disasters and industrial incidents, is the General Inspectorate for Emergency Situations (GIES; in Romanian, *Inspectoratul General pentru Situații de Urgență – IGSU*). This is a structure subordinated to the Minister of Administration and Interior. It was created on 9 September 2004,¹⁹³¹ by merging the Civil Defence Command (*Comandamentul Protecției Civile*) with the General Inspectorate of the Military Firefighters Corps (*Inspectoratul General al Corpului Pompierilor Militari*).

In such a configuration, policy guidance and oversight for civil protection are provided by the National Committee for Emergency Situations; coordination, control, and expert technical assistance is secured by the Ministry of Internal Affairs, via the General Inspectorate for Emergency Situations, and locally, by the County Inspectorates and the Inspectorate of the Municipality of Bucharest for Emergency Situations.

According to the Romania's National progress report on the implementation of the Hyogo Framework for Action for the period 2013-15, "[i]n order to improve the National System for Emergency Situation Management, based upon lessons learnt in the recent disasters, the legal framework has been changed twice in the last year. The National Committee for Special Emergency Situation has been created, with revised responsibilities and structures. Changing the structure of The National System on the other hand has delayed the adoption of the set of laws establishing the structures responsible with disaster risk reduction and their precise responsibilities."¹⁹³²

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Emergency Ordinance no.21/2004 has established the National Management System for Emergency Situations, which acts as reference body for Level 0 disasters. It is composed of emergency committees at the national and ministerial levels, the General Inspectorate for Emergency Situations, professional emergency services, operational centres for emergency situations, and an action commander.

At Level 1, there are the county committees for emergency situations (Romania is divided into 41 counties and 1 municipality – Bucharest), headed by the county prefects. The counties' council presidents (since 2008 the county council president is elected directly by the local people), managers of public institutions and private companies (that may generate emergency situations) are forming committees. The organisation, attributes and functions of the counties' committees are established by orders of the prefects.

The current Constitution and the Law on Local Public Administration determine the Prefect as a political figure, representing the Government. According to the law, the Prefect is "... responsible, in conformity with the law, for the preparation and implementation of non-military defence measures; the military authorities and the local bodies of the Ministry of Internal Affairs are required to inform the prefect on any problems relevant for the county; (the Prefect has also other duties)." (Art. 110)

¹⁹³¹ Available in Romanian at http://www.igsu.ro/documente/legislatie/HOTARARE_Nr1490.pdf.

¹⁹³² Romania National progress report on the implementation of the Hyogo Framework for Action (2013-15), p.5.

At Level 2 are local committees for emergency situations (each county is further subdivided into cities and communes, the former being urban, and the latter being rural localities; there are 319 cities and 2686 villages in Romania. Each city and village has its own mayor and local council). They are convened at city, commune or village level under the leadership of mayors. The members of local committees include a vice-mayor, local secretary, and representatives from public institutions and companies in that territory. The mayor, with the agreement of the prefect, organises and establishes the attributes and functions of the local committee.

A special status has been provided for the Bucharest municipal committee for emergency situations. In terms of governance, including on civil protection, the capital is equalised to a county level.

In later documents, the identification of 0, 1, and 2 levels has been replaced with “national,” “county” and “local” levels.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The role of the volunteers for the crisis management policy and especially for the civil protection from natural and industrial hazards is expanding at both normative and organisational levels. Recently they are regulated by a set of laws, governmental and ministerial acts:

- Volunteer Law no. 195 of 20 April 2001;
- Order of Ministry of Internal Affairs no. 718 of 30 June 2005, approving the capabilities and organisational structure of emergency volunteer services;
- Government Ordinance no. 1579 of 08 December 2005 regarding the statute of volunteer personnel from emergency volunteer services;
- Government Ordinance no. 160 of 14 February 2007 regarding the conditions and details for using the uniform protection equipment and distinctive signs for emergency volunteer services personnel;
- Order of Ministry of Internal Affairs no. 160 of 23 February 2007 on the rules for planning, organising and performing the emergency prevention activities within the emergency volunteer services.

According to the Romanian Volunteer Law (*Legea Voluntariatului*), adopted in 2001 and amended in 2006, volunteering is an activity of public interest, undertaken out of free will by a person aiming at helping others, without being motivated by financial or material gains. The public interest activity is carried out in various domains such as social assistance and services; environmental protection; culture, education, arts etc. The organisation hosting the volunteers or carrying out the volunteer activities may be a non-profit private or a public organisation, run in the public benefit.

2.7 Legal regulations for international engagements of first responders and crisis managers

At the international level, activities related to crisis management and disaster risk reduction, early warning, response and recovery are governed by different bi- and multi-lateral agreements, conventions, and compacts as well as with operational agreements for concrete emergency situations and missions.

3 Organisation

Romania is divided into 41 counties and 1 municipality (Bucharest): Alba, Arad, Arges, Bacau, Bihor, Bistrita-Nasaud, Botosani, Braila, Brasov, Bucuresti, Buzau, Calarasi, Caras-Severin, Cluj, Constanta, Covasna, Dimbovita, Dolj, Galati, Gorj, Giurgiu, Harghita, Hunedoara, Ialomita, Iasi, Ilfov, Maramures, Mehedinti, Mures, Neamt, Olt, Prahova, Salaj, Satu Mare, Sibiu, Suceava, Teleorman, Timis, Tulcea, Vaslui, Vilcea and Vrancea. Each county is further subdivided into cities and communes, the former being urban, and the latter being rural localities. There are 319 cities and 2686 communes in Romania. A county council, responsible for local affairs, as well as a prefect, appointed by the central government, administer each county.

The civil protection structure is organised at national and ministerial levels, for the capital city of Bucharest specifically, and at county and municipal levels.¹⁹³³ Decision-making is attributed to national (when two counties and more affected), county and local committee, depending on the emergency.

At the national level, an inter-ministerial body, the National Committee for Emergency Situations (NCES) has coordination responsibilities in terms of emergency management. The NCES is composed of decision-making representatives, experts and specialists designated by the ministries. The National Committee is established and acts under the direct guidance of the Minister of Administration and the Interior under the coordination of the Prime Minister.

The National Committee for Emergency Situations is structured as follows:

- President: the Minister of Internal Affairs;
- Vice President: one of the Secretaries of State within the Ministry of Internal Affairs;
- Members: one Secretary of State from each of the ministries involved or deputies representing heads of central public institutions;
- Consultants: one or two experts/specialists from each ministry and the central public institutions.

To handle inter-ministerial and crosscutting coordination, the committees for emergency situations are structured also at ministry, county and local level. The committees are chaired by the respective ministries/head of institution, county prefect (the Bucharest Committee is chaired by the Prefect of Bucharest), and the mayor (endorsed by the respective county prefect).

At national level, the General Inspectorate for Emergency Situations (GIES) is the national civil protection authority responsible for managing the implementation of emergency management actions and measures on national territory. The GIES is part of the National Emergency Management System and a component of the National Defence System. The GIES is an integrated body within the Ministry of Internal Affairs managed by a General Inspector.

All competent institutions in the field of defence, public order and national safety are required to transmit to the GIES or, if necessary, to the Minister of Internal Affairs or the Prime Minister information on potential emergencies, their expected evolution and consequences. The GIES communicates the decisions made by the Government or by the National Committee (through its

¹⁹³³ In terms of architecture, the Romanian National Emergency Management System is quite similar to the one of The Netherlands. For a comparison see http://ec.europa.eu/echo/files/civil_protection/vademecum/nl/2-nl-1.html.

Technical Secretariat) to the authorities of central public administration in order to secure coordinated management of emergencies. At county level, County Inspectorates for Emergency Situations operate in the 41 counties and in Bucharest. They are subordinated to the General Inspectorate for Emergency Situations (GIES) and provide - in their areas of competence - guidance and control of prevention and management of emergencies.

In addition to that, Operational Centres for Emergency Situations are organised at ministerial, municipal level (except Bucharest Municipality), city and commune levels. These centres can have a permanent character (for those ministries/institutions with complex functions within the National Emergency Management System) or a temporary character (they become active only when requested, following the decision by the National Committee for Emergency Situations).

The recent establishment of a Governmental Command Operational Centre (COCG), as a decision-making support for the National Committee for Emergency Situations (NCES), is seen as a way to make coordinated and rapid intervention in emergency situations, which will account for more lives saved and less money spent. The COCG is operational since 8 April 2014 when the centre hosted the first meeting of NCES led by the Prime Minister together with the Deputy Prime Minister for National Security, and all other members of the committee.



Figure 20: The Government's Command Operational Centre (COCG) at the Victoria Palace.¹⁹³⁴

Other state organisations involved in crisis management and emergency management

Gendarmerie. The Romanian Gendarmerie, component of the Ministry of Internal Affairs, is a specialised state agency with military status, having the following attributions under the law:

¹⁹³⁴ Source and photo: (copyright) Liviu Sova, AGERPRES.

defending public order, fundamental citizens' rights and freedoms, public and private property, preventing and detecting crimes and other violations of laws, protecting state institutions and fighting against terrorism. Due to its responsibilities, organisation, training and territorial coverage, the Romanian Gendarmerie contributes to guaranteeing the state sovereignty, independence, authority, unity, security and constitutional democracy throughout the national territory both in peacetime and in crisis. Romanian Gendarmerie units' activities are focused on law enforcement, respecting fundamental citizens' rights and freedoms while ensuring social equilibrium status within society.¹⁹³⁵

Police. In terms of emergency, the police is engaged in homicide, armed assault attacks, public disorder, traffic accidents resulting in human casualties or persons trapped in cars, explosions; electrocution, falls, landslides, serious subway accidents, aviation and train accident.

Ambulance. Bucharest Ambulance Service (S.A.M.B.) is a unique medical unit at both Bucharest and country level. It is a strategic medical unit, operating 24/7/365. S.A.M.B. is subordinated to the Bucharest Public Health Division and provides pre-hospital emergency medical assistance at both the requested location and during patients' transport to hospital (ill people, injured ones, pregnant women).¹⁹³⁶

Mobile Emergency Service for Resuscitation and Extrication (SMURD). SMURD is responsible for the entire range of interventions covering all emergencies for saving one or more persons' lives. These interventions include road accidents, explosions, work or home accidents such as falls from height or electric shocks, unconsciousness that include cardiac arrest, suspected strokes, acute respiratory insufficiencies and also multiple victim accidents. In addition to usual ambulances interventions, SMURD staff also uses various types of helicopters and airplanes for transferring patients in critical condition to different medical centres within the country or abroad. In these particular cases, the medical crew consists of two persons, one of them being a doctor with experience in emergency and intensive care.¹⁹³⁷

Inter-agency operations

Inter-agency operations during emergencies are managed by a person (action commander) nominated by the national, ministerial or county (or Bucharest) committees for emergency situations, depending on the nature or the extent of the event or on the number of forces involved. He/she may receive support in executing the tasks from the operative groups and the advanced operative point according to the legislation in force.¹⁹³⁸

3.1 Organisational chart

Romania's National Emergency Management System (NEMS) is a nationally owned mechanism of multiple stakeholders, which provides coordination and response in case of emergencies, and serves as an advocate for prevention and disaster risk reduction at different levels.

The core legal documents concerning the NEMS are:

- Emergency Ordinance no. 21 of 15 April 2004 on the National System of Emergency Situations Management;

¹⁹³⁵ Source: www.jandarmeriaromana.ro.

¹⁹³⁶ Source: www.ambulanta.ro.

¹⁹³⁷ Source: www.smurd.com.

¹⁹³⁸ This chapter has been based on variety of sources (with corrections, amendments and compilation): European Commission, Humanitarian Aid & Civil protection: Vademecum - Civil Protection; Zelean, Prelipcean, 2012; UNISDIR, WB, 2008; GIES web site <http://www.igsu.ro>.

- Ordinance no. 2288 of 9 December 2004 regarding support, provided by different stakeholders for crisis management;
- Decision no. 1489 of 9 September 2004 on the organisation and functioning of the National Committee for Emergency Situations;
- Decision no. 1490 of 9 September 2004 on the GIES;
- Decision no. 1491 of 9 September 2004 approving the Framework Regulation on the organisation, competence, functioning and endowment committees and operational centres for emergency situations.

The key components of NEMS are presented at Figure 11.

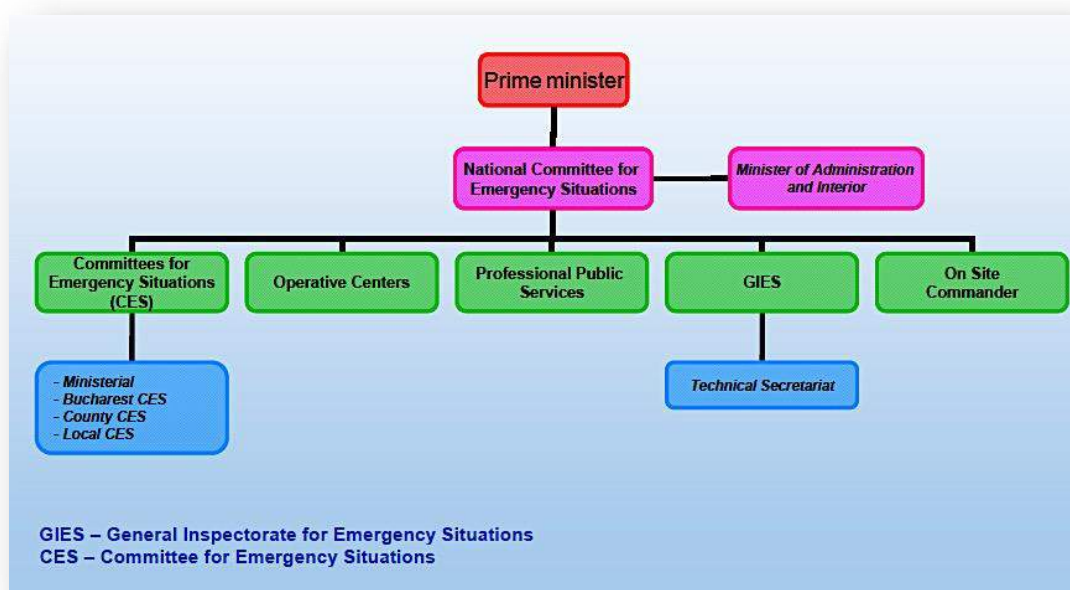


Figure 21: General structure of NEMS.¹⁹³⁹

NOTE: The National Committee for Emergency Situations has been recently transferred into National Committee for Special Emergency Situations (source: Romania National Progress Report on implementation of Hyogo Action Plan (2013-15)).

Within this architecture, NEMS has three levels of activation (Figure 12).

¹⁹³⁹

Source: GIES presentation, available at http://www.igsu.ro/documente/SAEARI/IGSU_EN.pdf.

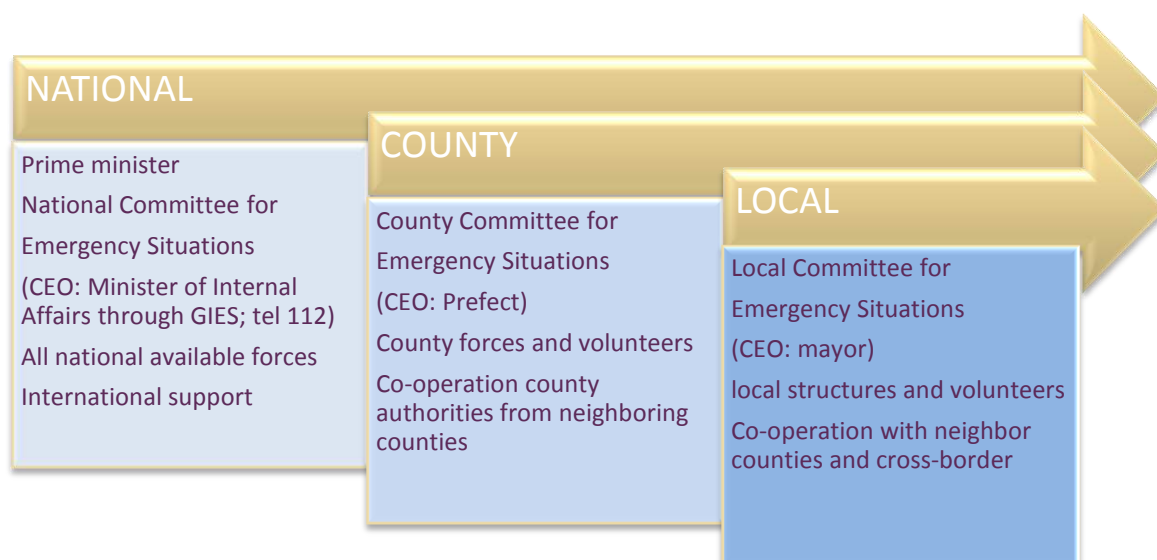


Figure 22: Institutional chain of command by levels of activation.

The Prime Minister is at the top of the NEMS. The Minister of Internal Affairs, who chairs the National Committee for Emergency Situations (NCES), reports directly to the Prime Minister. As described above, the NCES is an inter-ministerial organisation, composed of decision-makers and experts from authorities with responsibilities in emergency situations.

The Committee's attributes include: Initiating legislation regarding emergency management and approving ministerial and county committees' legal papers, examining and proposing for Government approval the national plan for human, material and financial resources for emergency management, subsequent to Prime-Ministerial approval, declare the setting-up/cessation of "warning status" at national level or at the level of several counties; decide the application of an evacuation plan under the proposal of ministerial or county committee.

NCES is responsible for the co-ordination in cases of emergency in more than two counties simultaneously (that determines the "national" level), the co-ordination of any disaster mitigation activities of international forces, and for disseminating information to the public regarding emergency management.

According to the Romania National Progress Report on Implementation of Hyogo Action Plan (2013-15), "In order to improve the National System for Emergency Situation Management, based upon lessons learnt in the recent disasters, the legal framework has been changed twice in the last year. The National Committee for Special Emergency Situation has been created, with revised responsibilities and structures."¹⁹⁴⁰ The decision follows the SMURD ¹⁹⁴¹ medical helicopter crash in the Siutghiol Lake when four people died.

According to the than the Interior Minister Gabriel Oprea, a "Unique Intervention Concept for Integrated Action in Emergencies Situations" will be developed. The exact measures and changes to the system have not yet been announced (December 23, 2014).¹⁹⁴²

Ministerial committees

¹⁹⁴⁰ Ibid., Romania's National Progress Report ... 2013-15, p. 5.

¹⁹⁴¹ Abbreviation in Romanian language of the Mobile Emergency Service for Resuscitation and Extrication.

¹⁹⁴² Source <http://www.romania-insider.com/an-emergency-rescue-helicopter-crashes-in-a-lake-near-the-romanian-seaside-resort-of-mamaia/137789/>.

Ministerial committees for emergency situations operate at national level and are composed of decision-makers and experts from ministries and other stakeholders within the civil protection domain.

The specific functions of different ministries and state agencies, regarding civil protection, are explained in Annex 1 to Government Ordinance No 2288/2004.¹⁹⁴³

County committees

County committees, responsible for managing emergency situations at county level, are headed by prefects. These committees are formed by the county council president, managers of public institutions and private companies and the managers of private companies that represent potential risks and can generate emergency situations. The organisation, attributes and functioning of county committees are established by orders of the prefect.

Local committees

Local committees for emergency situations are convened at city, commune and village level under the leadership of mayors. The members of local committees include: one vice mayor, local secretary, and representatives from public institutions and companies in that territory. The mayor, with the agreement of the prefect, determines the attributes and functions of the local committee.

Notably, according to Article 24 of the framework Law No 195/2006 on decentralisation, the local authorities are responsible for prevention and management of emergencies at local level, and for public order and security.

General Inspectorate for Emergency situations (GIES)

GIES is the focal point in the Romanian emergency system. It integrates the political decision-making with the executive bodies and relevant types of forces. Its responsibilities cover the whole spectrum of disaster management – from risk reduction to consequence management. GIES is responsible in peace and wartime for the rescue of people, public evacuation, firefighting, mitigation of the environmental consequences of accidents (including chemical, radiological and biological accidents) occurring during transport of dangerous substances.

In terms of prevention, the GIES major tasks include:

- Risk identification and assessment;
- Verifying the well-observance of fire safety regulations for designing, execution, utilization and maintenance;
- Verifying the application of specific measures in order to maintain acceptable risk levels;
- Population preparedness and emergency training;
- Coordination of professional public emergency services and volunteers.

In cases of disaster response, the GIES manages:

- Rescue actions (persons in hostile environment, trapped, isolated, suicide intentions);
- Evacuations and relocations of affected persons (disasters, armed conflict);
- Mitigation of accidents' consequences and alerts of responsible environment stakeholders (detection, radiation measurement, establish contamination degree, neutralisation);
- Extrications.

¹⁹⁴³ Available at <http://www.crucearosie.ro/uploads/Legislatie/Hotarare%202288%20din%202004%20-%20functii%20de%20sprijin.pdf>.

GIES includes National Operational Centre, Prevention Inspection, directorates for planning, logistics, and finance. Subordinated to the GIES are 41 County Inspectorates for Emergency Situations plus the Bucharest Inspectorate for Emergency Situations, training centres, schools, research, IT&C, warehouses, logistics. Its component layout operates according to the minimum response time 8 to 10 min in urban areas and 14 to 20 min in rural areas.¹⁹⁴⁴

Overall, within the NEMS architecture, responsibilities are shared as shown in Figure 13.

	Authorities	Normality	Emergency
NATIONAL	NCES (<i>Minister of Interior</i>) Ministerial Committees GIES On site commander	CNCCI Ministerial operative Centres 112	CNCCI (<i>reinforced</i>) Ministerial operative Centres 112
COUNTY	CCES (<i>Prefect</i>) County forces (<i>police, ambulance, ...</i>) County IES On site commander	CJCCI operative centres 112	CJCCI (<i>reinforced</i>) operative centres 112
LOCAL	LCES (<i>Mayor</i>) Local forces (<i>police, ambulance, ...</i>) Intervention units On site commander	Dispatchers 112	Dispatchers 112
GIES – General Inspectorate for Emergency Situations NCES, CCES, LCES – (National, County, Local) Committee for Emergency Situations CNCCI – National Centre for Coordination and Disaster Relief CJCCI – County Centre for Coordination and Disaster Relief			

Figure 23: Sharing of responsibilities within the NEMS.¹⁹⁴⁵

Volunteers and specialised NGO

Relevant volunteer and specialised NGOs are listed below.

Association of Voluntary Rescuers in Emergency Situations (ASVSU, <http://www.asvsu.ro/>) organises experienced specialists and volunteers for interventions in emergency, providing:

- Research-Search-release-rescue;
- First aid in emergency;
- Radio communications in cases of emergency;
- Accidental transportation from mountains;
- Psychological first aid;
- Search and Rescue Canine
- Search of missing children.

Romanian Red Cross (<https://www.ifrc.org/en/what-we-do/where-we-work/europe/romanian-red-cross>)

¹⁹⁴⁴ Source: Annex 2 to GO No 1490/ September 9, 2004.

¹⁹⁴⁵ Source: GIES presentation, available at http://www.igsu.ro/documente/SAEARI/IGSU_EN.pdf.

National Centre APELL for the Disaster Management – CN APELL RO. “Awareness and Preparedness for Emergencies at Local Level” (APELL) is a United Nations Environment Programme (UNEP) initiative in response to a number of industrial accidents that resulted in deaths and injuries, environmental damage, and extensive economic consequences for the surrounding communities. The APELL process is a methodological tool focusing on the local level for identifying possible industrial hazards, raising awareness of these hazards, and building local capacity for immediate, multi-party response in the event of an emergency. Romanian APELL co-ordinating group is allocated within the Babes-Bolyai University in Cluj-Napoca (<http://www.ubbcluj.ro>).

“Rescue Society of Bucharest” is a foundation, aiming to provide support for improving the quality of emergency medical services in Bucharest, especially the capacity of the “Bucharest Ambulance Service.” The foundation also organises scientific events in the field of emergency medical care locally, nationally and internationally and training courses for those interested in first aid. It has established a medical centre for healthcare of sexually exploited women.

Academia and research institutes: National Institute of Research and Development for Earth Physics, Institute of Geography, Institute of Geology, Institute of Geodynamics “Sabba S. Stefanescu,” German-Romanian Collaborative Research Centre (CRC), National Centre for Seismic Risk Reduction, and Research Centre for Disaster Management “Babeş-Bolyai.”

3.2 Organisational co-operation

Operations

The concept of emergency management operations is of a task force type. For each particular situation, a package of capabilities should be allocated and a commanding officer must be determined. When it is a first response operation, GIES has the leading role for immediate reaction. Otherwise, the commanding officer and the package of forces (capabilities) is assigned to the ministry, which is responsible for monitoring the particular source of hazard or threat.

The key coordination body—the NCES—has to be called immediately when a situation escalates to the “national” level (that means the emergency covers more than one county) or when the impact is high. In any case, NCES investigates the situation, coordinates efforts, capabilities and operations between both different agencies and centre-county-local levels assigned.

It is common for NCES to consider international support and, if needed, to deliver requests. GIES has a mandate to communicate with foreign partners, especially when the situation may have a cross-border impact. The Romanian contribution to the international humanitarian assistance and disaster relief operations is provided through the EU’s Monitoring and Information Centre (MIC), operated by the European Commission in the framework of Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions and the Euro-Atlantic Disaster Response Coordination Centre (EADRCC/NATO).

The GIES coordinates and is directly responsible for all international assistance offered/received on a bilateral or regional basis or through the MIC, EADRCC and UN-OCHA.

International assistance is offered/requested on a case-by-case basis, based on a decision by the National Committee for Emergency Situations at the request of the GIES.¹⁹⁴⁶

Capability planning

¹⁹⁴⁶

Source: HA&CP.

Even though there is not a formal system for co-ordinated inter-departmental capabilities planning and acquisition, NCES and GIES have mandate to co-ordinate any national level plans and programmes. The procurement is done usually through the ministries, county and local authorities as they have both specific responsibilities and budgets.

Regional initiatives

Romania is expanding its engagement in both bilateral and regional civil protection initiatives. The country has signed bilateral agreements for mutual assistance in cases of emergency with Bulgaria, France, Hungary, Moldova and Turkey. Emergency management agreements have been signed with Azerbaijan, Czech Republic, Denmark, France, UK and USA.

Within some multilateral formats Romania is also involved in cross-border co-operation programmes with non-EU states, including Moldova, Ukraine and Serbia.

On a regional level, Romania (mostly through GIES) participates actively in initiatives, projects and actions developed under the regional bodies, which Romania is a part of, such as:

- Civil Military Emergency Planning Council for South-Eastern Europe (CMEPC SEE);
- Black Sea Initiative on Civil Military Emergency Preparedness (BSI CMEP);
- Commission on the Protection of Black Sea Against Pollution – Advisory Group on Environmental Safety Aspects of Shipping (AG-ESAS);
- European Maritime Security Agency (EMSA);
- Stability Pact for South-Eastern Europe / Disaster Prevention and Preparedness Initiative (DPPI);
- DKMT Euro-Region (Danube – Kris – Mures – Tisza);
- South-Eastern European Defence Ministerial (SEDM);
- Organization of the Black Sea Economic Cooperation (BSEC).

GIES participate in the NATO's missions in civil emergency planning with special attention to: critical infrastructure protection, preparedness for consequence management in the event of natural disasters and in incidents involving chemical, biological, and radiological materials. GIES also provides representation in the following bodies:

- Civil Emergency Planning Committee (CEPC);
- Civil Protection Group (CPG);
- Group of Experts on the Evaluation of humanitarian and disaster relief.

In the last ten years, Romania has provided assistance to other countries in case of emergency. Some of the support has been provided even when Romania has been also in emergency:

- 2006 – to Bulgaria: anti-pollution materials;
- 2006 – to Hungary: flood protection materials;
- 2007 – to Greece: means for aerial forest firefighting;
- 2010 – to Hungary: flood protection materials;
- 2010 – to Moldova: materials and flood protection intervention teams;
- 2011 – to Libya: emergency airlift;
- 2011 – to Turkey: support materials;
- 2012 – to Bulgaria: flood protection materials.

Further expansion of the Romania cross-border emergency management co-operation has been conceptualised through Government approved *National Strategic Concept of territorial development ROMANIA 2030*.¹⁹⁴⁷

¹⁹⁴⁷ Available in English at http://www.mdrl.ro/_documente/publicatii/2008/Brosura_Conc_strat_EN.pdf.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

In the timeframe of the study we were not able to identify publicly available information that Romania produced standing operational procedures (SOP) for civil protection.

The National Operations Centre, which is a structure of the GIES, seems to be capable of producing such standards. The Centre operates the following services and departments:

- Service analysis, evaluation and coordination of intervention;
- Exhaust Service, pyrotechnics and emergency rehabilitation CBRN;
- Services are operational and dispatch;
- Disaster Medicine Department;
- Psychological compartment;
- Compartment specific standards and regulations;
- Permanent Technical Secretariat of the National Committee for Emergency Situations;
- Secretarial Department.

GIES has participated in the NATO led “Project on Minimum Standards and Non-Binding Guidelines for First Responders Regarding Planning, Training, Procedure and Equipment for Chemical, Biological, Radiological and Nuclear (CBRN) Incidents.” In result, a collectively produced Guideline for First Response to a CBRN Incident is in use.¹⁹⁴⁸ The guide covers:

- Information gathering;
- Scene management;
- Saving and protecting lives;
- Additional/specialist support.

4.2 Operations planning

Civil protection is a component of the national security system and represents an integrated range of specific activities, and organisational, technical, operational measures and tasks having a humanitarian and public character. Civil protection is planned, organised and performed according to the law on civil protection with a view to preventing and reducing disaster risks, protecting the population and the environment against the effects of emergencies and armed conflicts and securing life-saving conditions during emergencies.

The responsibility for the elaboration of (national) plans in emergency-related areas lies with the National Committee for Emergency Situations, the Ministerial Committees for Emergency Situations, as well as with the county and local committees for emergency. Planning activity for civil protection is set up through following documents:

- At national level: National Development Plan, National Strategy on Civil Protection, Climate

¹⁹⁴⁸ Available in English at http://www.igsu.ro/documente/SAEARI/Brochure_First_Response_Guidelines_-_EN.pdf.

change policy and strategy, Civil defence policy, strategy and contingency planning;

- At ministerial level: Operational plans for specific disasters, elaborated by the Ministerial Committees for Emergency Situations;
- At county and local level: Plans for protection and intervention in case of specific disasters; the relevant authorities draft and implement a General Urban Plan, taking into consideration the hazard maps.

The economic agents have emergency plans that are elaborated in cooperation with the counties civil protection inspectorates. These plans cover natural and technological disasters that may affect the economic agent and surrounding population. The basic principle in these plans is to use all possible human and material resources for interventions.

Academic, research, learning and nongovernmental organisations, volunteers and population are involved in the planning process at certain levels.

For protection against floods, meteorological phenomena and accidents threatening dams, once every four years plans are elaborated at county, city, locality and hydrographic basin level, which are revised whenever necessary. The plans represent technical documentation, containing preventive and intervention measures, detailing the information flow for warning the population in case of a danger. The responsibility for the activation of these plans belongs to the chairmen of county and local committees for emergency situations and the territorial water management units.

For earthquakes and landslides, the county and local emergency situation committees have plans for each phase of the disaster management process. These plans are revised annually and/or in account of the experience in a particular disaster. The Chairpersons of respective committees are responsible for the elaboration and revision of the plans.

The GIES draws and submits the National Plan for Emergency Situation Management for adoption by the Government. The national plan outlines the necessary human, material and financial resources. The GIES also agrees on intervention or technical assistance aspects of international plans for emergency management and submits them for adoption by the National Committee for Emergency Situations.

4.3 Logistics support in crises

In the timeframe of this study, we were not able to find information on the use of private logistic providers. The use of military logistic support is provided on the basis of a decision of the National Committee for Emergency Situations.

4.4 Crisis communication; Alert system; Public Information and Warnings

The basic legal document for communications in emergencies is Government Ordinance No. 548/2008, for the approval of the National Strategy for Communication and Public Information in Emergency Situations.

Romanian Emergency Management Information System (EMIS) is a fully integrated information system connecting all Emergency Operational Centres (EOC) and other stakeholders for streamlining information sharing and decision support for daily routine and in case of emergency as well. It is designed to support all phases of emergency management: mitigation, preparedness, response and recovery and is deployed in the EOCs of the National Emergency Management System (NEMS) as shown on Figure 14.

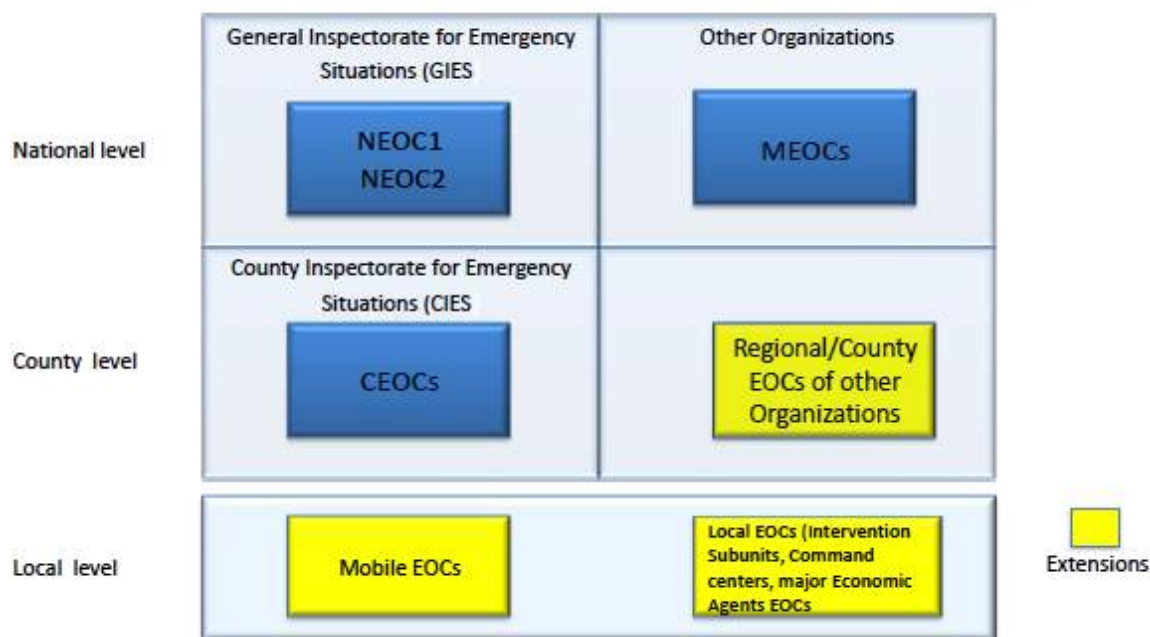


Figure 24: Romanian Emergency Management Information System within the NEMS.¹⁹⁴⁹

In this system, the EOCs are information hubs that move the flow of information through WAN from different primary sources towards the two levels of centralisation: country level (County Emergency Operation Centres, CEOCs) and ministerial level (Ministerial Emergency Operation Centres, MEOCs). It is replicated at the national level (NEOC 1, 2) where it is summarised, analysed, verified and presented in forms of draft decisions.

The CEOCs are not fully staffed on a permanent basis. In case of emergency, experts from different organisations operate them. NEOC1 has the coordinator's role in any serious emergency, while NEOC2 is activated only in cases of countrywide crisis as a reserve command centre.

In terms of the operational process, the system is organised in such a way as to support the basic emergency management functions (Figures 15 and 16):

- Planning (including tasking, task force creation, and budgeting);
- Response and recovery (including task force creation, evacuation, and damages in people, infrastructure and material);
- Alerting and notification;
- Reporting on situations and interventions;
- EMIS database management (including organisation, human resources, logistics, risks, hazardous materials management, evacuation, etc.).

¹⁹⁴⁹ Monitor II available at http://www.monitor2.org/downloads/MONITORII_WP4_Partner%20specific%20module_EMIS_PP6.pdf.

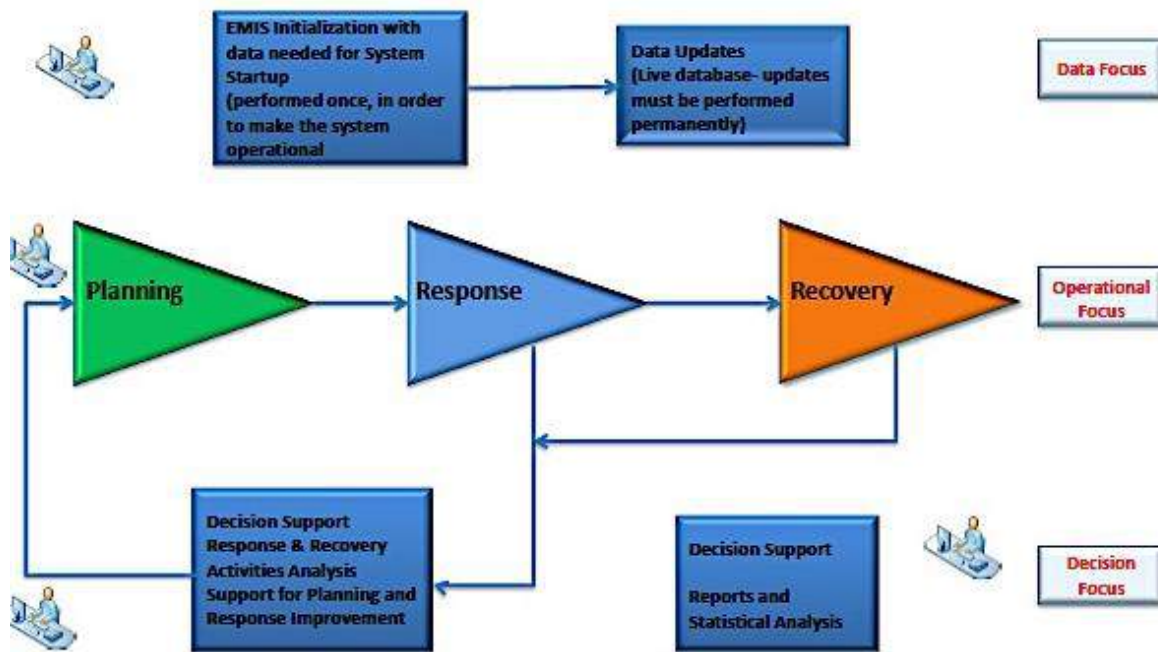


Figure 25: EMIS operational process.

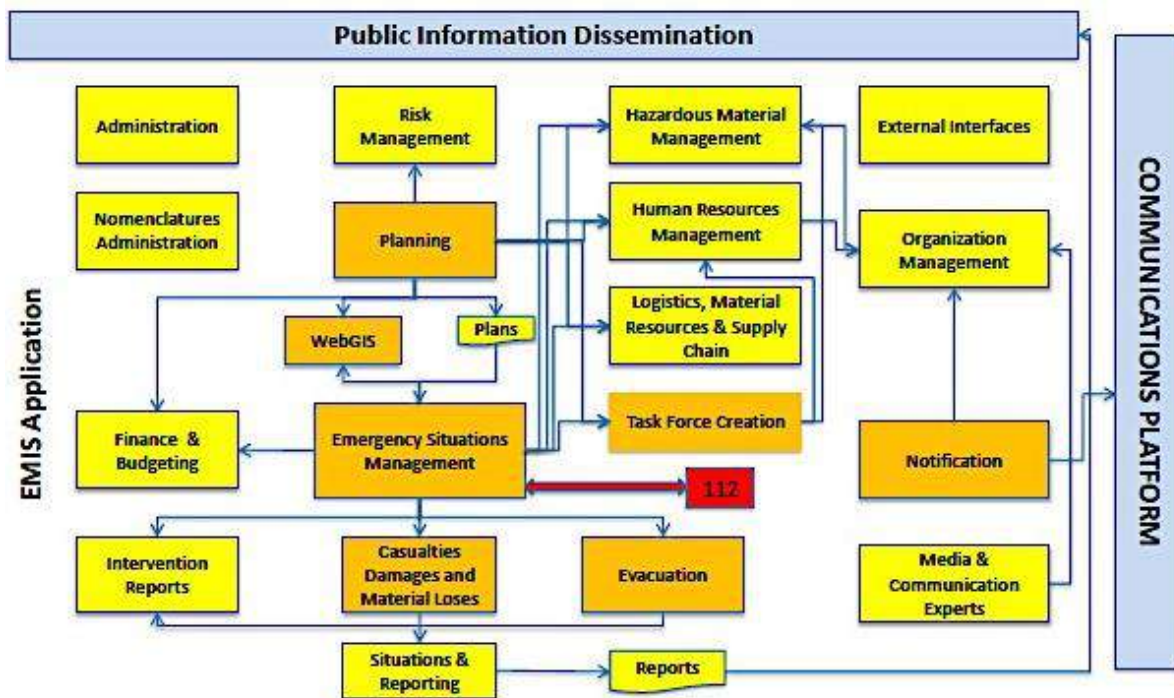


Figure 26: EMIS modular architecture

The workflow within the EMIS is presented in Figure 17.

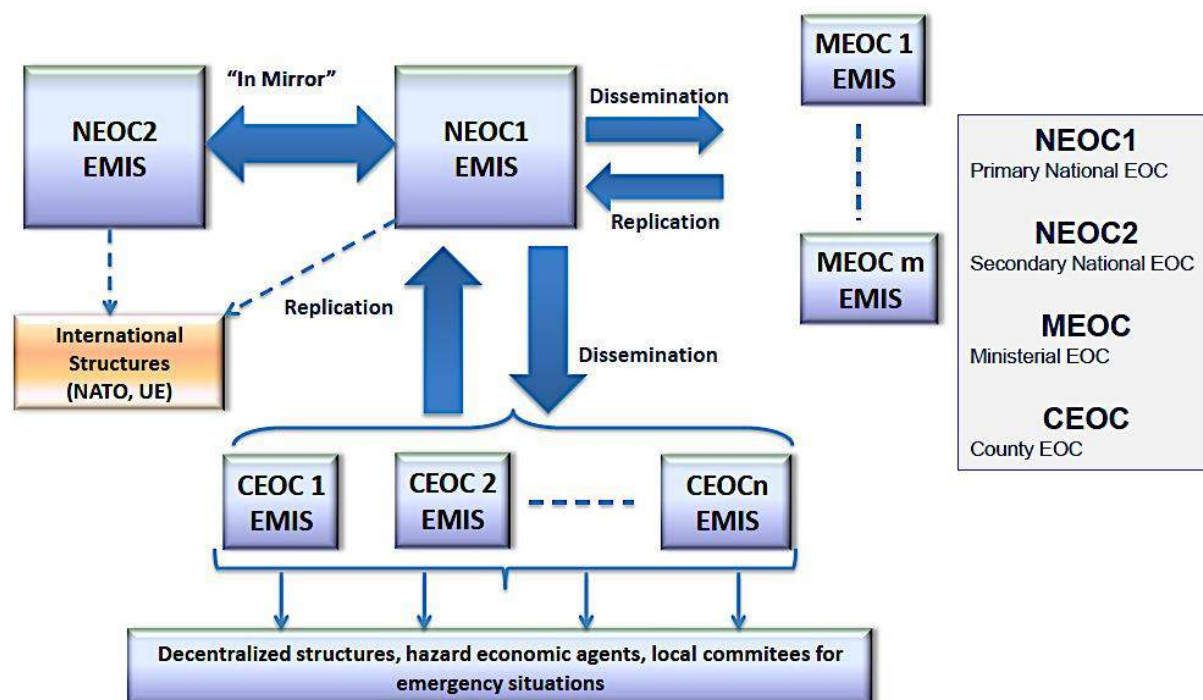


Figure 27: EMIS information workflows

Thus, the Romanian Emergency Information Management System seems to be completely relevant to the architecture of the NEMS. It covers the main processes as prescribed by the National Strategy on Civil Protection and related legislation – preparation, response and recovery.

Technically, the EMIS may serve as a network for daily routine exchange of information and reports, as well as during any kind of emergencies, allowing sharing of information between all participating actors in both vertical and horizontal projection. The system also can operate in two modes – real and simulation. The latter is a powerful infrastructure for crisis management training.

The system provides opportunity to trace any crisis management activities at each command level, including information on victims and damages, statistics and reports. In terms of lessons learned, this is a valuable source of analyses and measures to improve the overall system.

The EMIS is a component and key backbone of the national emergency alert system.

Alert information sources

Additionally to the national EMIS there are variety of independent alert networks, channels, and other opportunities that make the Romanian alert system more complicated but flexible and sustainable in unexpected emergencies.

The Single National Emergency Call System (SNECS). SNECS is a vital constituent of the universal service obligations, as laid down the EU acquis. The SNECS consists of 40 (one in every county capital, with back-up capacities) emergency call answering centres known as Public Safety Answering Points (PSAP) and their associated equipment - an operative telecommunications system, designed to notify, receive, process and transfer the emergency calls to the requested services, in a centralised and unitary way. The system also applies to the communications between the Police, the Fire

Brigade, and the Ambulance special response systems, which have the obligation to respond in case of emergency calls.¹⁹⁵⁰

The SNECS receives and automatically records the emergency calls received on/through telephone, radio, automatic announcement devices, signalling, and alarming by other methods, confirming and locating, as much as possible. It analyses, organizes and promptly transfers the emergency calls as received to specialised response agencies, competent authorities (depending on the nature of the events and their consequences); transfers immediately the calls, the data and the information received in case of disaster to the NCES, receives and records the data and information on the events and response development and collects, stores and makes available for the competent authorities the data regarding the handled emergency calls. This is a multi-lingual service made available to all countrywide citizens (both Romanian and foreign) who are in an emergency situation.¹⁹⁵¹

Rapid Early Warning System in Romania (REWS) for earthquakes has been developed, including the following stages:

- 1980-1982 – Installation of telemetry seismic network with 18 seismic stations
- 2004 – REWS extended to dangerous facilities;
- 2007 – REWS for nuclear facilities;
- 2011-13 – Danube Cross-border System for Earthquakes Alert.

Accident Emergency Warning System (AEWS) in the Danube Basin. AEWS is activated whenever there is a risk of trans-boundary water pollution, or threshold danger levels of hazardous substances are exceeded. The AEWS operates on a network of Principal International Alert Centres in each of the participating countries. These centres are made up of three basic units:

- Communication Unit (operating 24 hours a day), which sends and receives warning messages;
- Expert Unit, which evaluates the possible trans-boundary impact of any accident using the database of dangerous substances and the Danube Basin Alarm Model;
- Decision Unit, which decides when international warnings are to be sent.¹⁹⁵²

Electronic sirens, TV and radio and the Internet is used by responsible national agencies, e.g. Meteoalarm and National Institute of Hydrology and Water Management.

Operative information exchanged between operational forces involved in interventions is handled via a SIMPLEX handset. Coordination information is handled via a TETRA handset and the Mobile Command Post. Public information systems use TV, the radio, spokespersons and live transmissions from disaster scenes transmitted through the Mobile Command Post.

¹⁹⁵⁰ Sources: <http://www.112.ro/index.php?limba=en>; and Current Status of Emergency Response System (ERS) in India and Model ERS Based on International Best Practices (case study of Romania) - http://www.adrc.asia/aboutus/vrdata/finalreport/2012B_IND_fr.pdf.

¹⁹⁵¹ Ibid.

¹⁹⁵² Source: <http://www.icpdr.org/main/activities-projects/aews-accident-emergency-warning-system>.

5 Capabilities

To achieve legally determined aims and goals, the Romanian strategy and policy on civil protection, the components of the National Emergency Management System, as well as the civil protection volunteers and professionals need to be prepared, trained and equipped.

5.1 Human resources

No open systematic information on human capacity for emergency management. The UNIDIR and The World Bank sponsored study as of 2008, as well as a 2007 GIES presentation provide the following figures:

- People, involved in civil protection in normal condition – 1 200;
- Resource of the General Inspectorate for Emergency Situation and its subordinates – 31 000;
- Organised into detachments volunteers around the country – 131 000;
- Personnel from private enterprises – 21 175.¹⁹⁵³

There is no definitive data available on the total number of volunteers in Romania. The lack of data on this matter is determined by two key factors:

- Not all volunteers sign a volunteering contract with the host organisation;
- There is no national register of volunteering contracts.

By way of background, according to a comprehensive study of the European volunteerism (GHK, 2010), the actual proportion of the overall active volunteers in Romania ("who do voluntary work on a regular monthly basis"), but not specifically on emergencies, is estimated to be fewer than 2% of the adult population. By this criterion, Romania has been classified by the study in the group of countries with low or relatively low levels of participation in volunteering with a modest trend towards an increase.

5.2 Materiel (non-financial) resources

In accordance to the National progress report on the implementation of the Hyogo Framework for Action (2011-2013) there are no funds dedicated for disaster risk reduction measures. The investment in response and recovery leads to limited/no budget left for disaster risk reduction measures. Most of the time, local authorities have to face many and various challenges with a limited amount of money and some of the emergency situations funds are used to cover more urgent needs. Important amounts of money were invested in prevention activities and in disaster risk reduction measures, especially in the flood risk field. These funds are from the local councils, decentralised public services, central authorities and European programs.

The National Administration for State Reserves is responsible for managing all materials and goods for supporting the affected population, on the basis of a governmental decision.

At the county level, emergency situation inspectorates manage warehouses with protection, intervention and first necessity materials for displaced population, financed by the counties' budgets.

¹⁹⁵³ Sources: GIES presentation and (UNISDIR, WB, 2008).

The warehouses belonging to the Romanian Red Cross can provide shelter materials, clothes, footwear and foods.

5.3 Training

The National Centre for Training Improvement in Emergency Situations Management¹⁹⁵⁴ operates regional training centres, which train personnel involved in civil protection and high-level public workers, and public workers with management responsibilities in the National System for Emergency Situations (officers, non-commissioned officers, public administration personnel, etc.).

There is a national emergency management exercises programme, which is part of the GIES main activities plan (not available to the public). Exercise planning is based on risk analyses and preparedness/prevention needs.

5.4 Procurement

5.4.1 Procurement regulation

The general legal framework of the public procurement legislation is Government Emergency Ordinance no. 34/2006 on the awarding of public procurement contracts, works concession contracts and services concession contracts ("GEO no. 34/2006"). In addition, the enforcement norms and secondary legislation are equally important.

In some context of the emergency management, the Government Emergency Ordinance no. 114/2011 on the awarding of certain public procurement contracts in the defence and security fields could be applied.

5.4.2 Procurement procedures

The International Comparative Legal Guides explains the following way the public procurement procedures in Romania:

- *Open procedure, within which any interested economic operator has the right to submit a tender; this procedure is carried out in one stage;*
- *Restricted procedure, within which any economic operator is entitled to submit an application, but only selected applicants are allowed to submit a tender; this procedure is carried out in two stages: selection of applicants and evaluation of tenders;*
- *Competitive dialogue, within which any economic operator is entitled to submit an application and the contracting authority conducts a dialogue with the admitted applicants in order to identify one or more solutions that can meet its requirements; once a solution is identified, the selected applicants prepare the final tender on the basis of that solution; this procedure is carried out in three stages: pre-selection of applicants, dialogue and evaluation of final tenders;*
- *Negotiated procedure, within which the contracting authority carries out consultations with the selected applicants and negotiates the contract terms, including the price, with one or several tenderers; the negotiated procedure can be carried out with or without prior publication of a contract notice; the negotiated procedure with prior publication of a contract notice is carried out in two stages: pre-selection of applicants; and negotiation;*
- *Call for tenders, namely the simplified procedure applicable for the award of contracts*

¹⁹⁵⁴ Source: <http://www.cnppmsu.ro/>.

below EU thresholds and above direct purchases thresholds, whereby the contracting authority requests tenders from several economic operators; this procedure is carried out in one stage; and

- *Design contest, namely a special procedure through which the contracting authority purchases, mainly in the fields of city and country planning, architecture or data processing a plan or a project by selecting it through a jury, based on competitive criteria, with or without awards.*¹⁹⁵⁵

The experts conclude that, “As a general rule, contracting authorities shall apply the open or restricted procedure. Only in specific circumstances, expressly provided by the law, the contracting authorities may award public contracts by means of other award procedures.”¹⁹⁵⁶

When the procurement of materials for civil protection is in the scope of particular ministry, then it has the responsibility to provide the necessary items or services. As a first step in the process, an annual plan for centralised procurement is prepared and during the budget year, public tenders are announced. In some cases, the tenders could be classified. In general, tenders are also made public at the web site of GIES.¹⁹⁵⁷

5.5 Niche capabilities

The Romanian capacity for emergency response includes several niche capabilities of potential utility for neighbouring countries and EU crisis response. These include: pyrotechnical capabilities for drainage, controlled breaches, and detonation; for water purification; transportation; and for marine de-pollution. Military cargo aircraft are also available in cases of emergencies at home and abroad (C-27J Spartan – 6, C-130 Hercules – 3, and An-26 Curl – 4).

¹⁹⁵⁵ Source: International Comparative Legal Guide, Romania, Public Procurement 2015. Available at <http://www.iclg.co.uk/practice-areas/public-procurement/public-procurement-2015/romania>.

¹⁹⁵⁶ Ibid.

¹⁹⁵⁷ Procurement at GIES web site: http://www.igsu.ro/index.php?pagina=centr_ap.

6 Conclusion

Emergency management in Romania is a government function with rapidly growing importance during the last decade. Almost every year, serious natural disasters motivate and force the country leadership to work systematically on enhancing the relevant system for crisis management. Public expectations for a more decisive role of the state are also on the rise. The reform efforts' focus is currently diffused between a prioritisation of the natural disasters and terrorism and a coherent strategic approach.

Over the last two decades, the concept, legal framework and institutions of the civil protection system have been completely changed. The emergency system has performed better after the reform, but still lacks "...the knowledge and the necessary legislative, technical and financial capacities to respond effectively..." (Zulean, Prelipcean, 2012). The system has been oriented to cope mostly with "known unknowns" as earthquakes, floods and extreme temperatures, but there is a low level of preparedness and capabilities to respond to new types of threats.

Conceptually, the emergency management in Romania has not yet benefitted from a comprehensive civil security approach. Since the end of the authoritarian regime, the sector's focus gradually moved from wartime "civil defence" towards building an organisation that is more relevant to contemporary threats and risks. The transformation has resulted in the introduction of two basic architectures: the National Emergency Management System and the National System on Preventing and Combating Terrorism. Other elements of the comprehensive civil security, such as the economic, ecological, and social, have not been integrated so far.

De-centralisation in emergency management is a fact in legal and organisational terms. However, the lack of balance between the capabilities of ministries, and those of county and local authorities is obvious. As budgets dedicated to emergency management are not assigned to particular programmes, they tend to be spent for other than risk reduction purposes, mostly for post crisis recovery. Hence, funding is insufficient to fill the gaps in risk reduction, development of capabilities and nation-wide training.

Romanians expect the state to play a more active role in crisis management. Individual insurance seems to be at very basic level. General emergency training is limited. State agencies and several NGOs are campaigning for volunteer contribution and self-insurance, but they are considered mostly low profile, as the interest of the young generation in any volunteer work is in decline. The business has a defined, but limited role in the Romanian civil emergency system; it is more effective in the protection of privately owned critical infrastructures.

Romania is relatively active in the international co-operation for natural and technological risk reduction and emergency management. Bilateral agreements have been signed with all neighbours and co-operation is recently considered as effective. The country is engaged in the work of committees and working groups dealing with the EU's civil protection. Its specialised structures participate and organise exercises and trainings. Romania has activated the EU's MIC and received support several times, and has provided assistance to other EU Member States and non-EU countries. International co-operation is seen as an important factor for rapid response and filling the capability gaps.

Resources

Legislative acts

Basic legal acts:

- Ordinance no. 88 of 30 August 2001 regarding the establishment, organisation and functioning of public services for emergency situations;
- Emergency Ordinance no. 21 of 15 April 2004 on the National System of Emergency Situations Management;
- Emergency Ordinance no. 25 of 21 April 2004 amending and supplementing Government Ordinance no. 88/2001 regarding the establishment, organisation and functioning of public services for emergency situations;
- Ordinance no. 360 of 14 September 2004 approving the performance criteria for the organisational structure and professional equipment for emergency services;
- Decision no. 1492 of 9 September 2004 concerning the organisation, functioning and responsibilities of the professional emergency services (replacing Government Ordinance no. 88/2001);
- Law no. 481 of 8 November 2004 on civil protection;
- Decision no. 547 of 09 June 2005 approving the National Strategy for Civil Protection;
- Ordinance no. 1134 of 13 January 2006 approving the Regulation on planning, preparation, organisation, conduct and management of intervention stocks of emergency services professional, www.igsu.ro/documente/legislatie/OMAI_1134_din_2006_pentru_aprobarea_Regulamentului.pdf;
- Ordinance no. 1184 of 6 February 2006 for the approval of the organisation and ensure the activity of emergency evacuation;
- Decision no. 548/2008, for approval of the National Strategy for Communication and Public Information for Emergency Situations.

Other normative acts

Acts related to protection from natural hazards:

- Law no. 307 of 12 July 2006 on protection against fire;
- Regulation of 12 May 2005 concerning the management of emergencies arising from floods, hazardous weather, hydro construction accidents and pollution incidents.

Acts related to protection from industrial accidents:

- Law no. 92/2003 on the ratification and transposition of the Convention into the national legislation;
- Decision no. 95/2003 on the control of major accident hazards involving dangerous substances;

Implementation agency or department regulations:

- Decision no. 1489 of 9 September 2004 on the organisation and functioning of the National Committee for Emergency Situations;

- Decision no. 1490 of 9 September 2004 on the GIES;
- Decision no. 1491 of 9 September 2004 approving the Framework Regulation on the organisation, competence, functioning and endowment committees and operational centres for emergency situations;
- Order no. 370 of 28 September 2004 approving Regulation on organisation and operation of county and Bucharest emergency inspectorates;
- Decision no. 259 of 31 March 2005 on the setting up and establishing the powers of the National Centre for Fire Safety and Civil Protection;
- Decision no. 1514 of 29 November 2005 amending Government Decision no. 1 490/2004 for the approval of the organisation and functioning and organisational structure of the General Inspectorate for Emergency Situations.¹⁹⁵⁸

Decision no. 1489 of 9 September 2004 on the organisation and functioning of the National Committee for Emergency Situations.

Decision no. 1490 of 9 September 2004 on the GIES.

Decision no. 1491 of 9 September 2004 approving the Framework Regulation on the organisation, competence, functioning and endowment committees and operational centres for emergency situations.

Decision no. 1492 of 9 September 2004 concerning the organisation, functioning and responsibilities of the professional emergency services (replacing Government Ordinance no. 88/2001).

Decision no. 1514 of 29 November 2005 amending Government Decision no. 1 490/2004 for the approval of the organisation and functioning and organisational structure of the General Inspectorate for Emergency Situations.

Decision no. 259 of 31 March 2005 on the setting up and establishing the powers of the National Centre for Fire Safety and Civil Protection.

Decision no. 547 of 09 June 2005 approving the National Strategy for Civil Protection.

Decision no. 548/2008, for approval of the National Strategy for Communication and Public Information for Emergency Situations.

Decision no. 95/2003 on the control of major accident hazards involving dangerous substances.

Emergency Ordinance no. 21 of 15 April 2004 on the National System of Emergency Situations Management.

Emergency Ordinance no. 25 of 21 April 2004 amending and supplementing Government Ordinance no. 88/2001 regarding the establishment, organisation and functioning of public services for emergency situations.

Government Ordinance no. 1579 of 08 December 2005 regarding the statute of volunteer personnel from emergency volunteer services.

Government Ordinance no. 160 of 14 February 2007 regarding the conditions and details for using the uniform protection equipment and distinctive signs for emergency volunteer services personnel.

Law no. 307 of 12 July 2006 on protection against fire.

Law no. 481 of 8 November 2004 on civil protection.

¹⁹⁵⁸ A more detailed list of legislation pertaining to crisis management is available in the National Report regarding the Disasters Prevention in Romania, available at <http://www.unisdr.org/2005/mdgs-drr/national-reports/Romania-report.pdf>.

Order of Ministry of Internal Affairs no. 160 of 23 February 2007 on the rules for planning, organising and performing the emergency prevention activities within the emergency volunteer services.

Order of Ministry of Internal Affairs no. 718 of 30 June 2005, approving the capabilities and organisational structure of emergency volunteer services.

http://www.igsu.ro/documente/legislatie/OMAI_1134_din_2006_pentru_aprobarea_Regulamentului.pdf Ordinance no. 1134 of 13 January 2006 approving the Regulation on planning, preparation, organisation, conduct and management of intervention stocks of emergency services professional.

Ordinance no. 1184 of 6 February 2006 for the approval of the organisation and ensure the activity of emergency evacuation.

Ordinance no. 360 of 14 September 2004 approving the performance criteria for the organisational structure and professional equipment for emergency services.

Ordinance no. 370 of 28 September 2004 approving Regulation on organisation and operation of county and Bucharest emergency inspectorates.

Ordinance no. 88 of 30 August 2001 regarding the establishment, organisation and functioning of public services for emergency situations.

Regulation of 12 May 2005 concerning the management of emergencies arising from floods, hazardous weather, hydro construction accidents and pollution incidents.

Volunteer Law no. 195 of 20 April, 2001.

Official documents (white papers, strategies, etc.)

National Security Strategy (published by the Ministry of Defence in 2007)

National Strategy on Civil Protection, published in Official Gazette no. 600 of 12 July 2005

National Strategy for Communication and Public Information for Emergency Situations, published in Official Gazette of Romania, Part I, no. 426 of June 6, 2008

National Waste Management Strategy

Online resources (websites of key CM organisations)

Association of Voluntary Rescuers in Emergency Situations (ASVSU), <http://www.asvsu.ro/>

Institute of Geodynamics "Sabba S. Stefanescu", <http://www.geodin.ro/>

Institute of Geography (Romanian Academy of Sciences), <http://www.geoinst.ro/publications.html>

Institute of Geology, <http://www.igr.ro>

Ministry of Agriculture and Rural Development, <http://www.madr.ro/ro/>

Ministry of Communications and Information Society, <http://www.mcsi.ro/>

Ministry of Economy, Trade and Business Environment, <http://www.minind.ro/>

Ministry of Education, Research, Youth and Sports, <http://www.edu.ro/index.php/base/frontpage>

Ministry of Environment and Forests, <http://www.mmediu.ro/beta/>

Ministry of Foreign Affairs, <http://www.mae.ro/>

Ministry of Health, <http://www.ms.gov.ro>

Ministry of Internal Affairs, <http://www.mai.gov.ro/Home/index.htm>

Ministry of National Defence, <http://www.mapn.gov.ro/>

Ministry of Public Finance, <http://www.mfinante.ro/acasa.html?method=inceptut&pagina=acasa/>

Ministry of Transportation, <http://www.mt.ro/nou/index.php/>

National Administration of State Reserves and Special Problems, <http://www.anrsps.gov.ro/>

National Centre for Seismic Risk Reduction, http://cnrrs.utcb.ro/cnrrs_en/ncsrr.html

National Institute of Research and Development for Earth Physics, <http://infp.infp.ro/>

National Meteorological Administration, http://www.meteoromania.ro/anm/?lang=ro_ro

Nuclear Agency, <http://www.andrad.ro/>

Protection and Guard Service, <http://www.spp.ro/>

Romanian Intelligence Service, <http://www.sri.ro/>

The General Inspectorate for Emergency Situation, <http://www.igsu.ro/>

The National Authority for Sanitary Veterinary and Food Safety, <http://www.ansvsa.ro/>

The National Commission for the Control of Nuclear activity, <http://www.cncan.ro/main-page/>

The Special Telecommunications Service, <http://www.stsnet.ro/>

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Expert interviews

Expert from the Centre for East European and Asian Studies, Bucharest.



Driving Innovation in Crisis Management for **E**uropean **R**esilience

SLOVAKIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: AIT (Stefan Schirnhofner, Bettina Jager)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

With a risk of 3.57% Slovakia ranks on the 135th place of the World Risk Report 2014. In the last twelve years, floods, storms, heat waves as well as cold waves affected Slovakia the most.

The initial regulation of civil protection in Slovakia can be dated to 1994, when the Act of the National Council of the Slovak Republic No. 42/1994 Coll. of Laws on Civil Protection of the Population was adopted. Therein, the narrow outlook of the protection concept focused solely on times of war, was expanded to the protection of the population also in peaceful times. Important milestones in the field of civil protection were reached in 2002 with the Acts concerning the reform of the Integrated Rescue System (IRS), the Management of the State in Crisis Situations apart from Wartime and States of War and the Constitutional Act 10 on National Security of the State in War, the State of War, State of Exception and State of Emergency (Act Nr. 227/2002 Coll.), which is the overall civil protection Act. For crisis and disaster situations, the Slovakian civil protection concept envisages rescue measures, mitigation and elimination actions as well as an inter-organisational and cross-border cooperation in for the assistance in emergencies.

At the regional level, the IRS plays a vital part in the Slovakian civil protection. Operated by regional state officers, the Ministry of Health and the Fire Rescue Brigade the IRS provides response to disasters at first instance. If an emergency exceeds the capacity of the regional level, a central crisis staff under the chair of the Minister of the Interior will be established to coordinate measures of the state and the self-governmental regions of the counties. While the ministerial level acts as a central planning and decision-making body, the assigned duties will be carried out by authorities at the regional and the local level.

As most relevant bodies of the Slovakian civil protection, the Government of the Republic, the Ministry of the Interior as well as other ministries, district officers, self-governmental regions as well as the municipalities can be identified. Apart from administrative/governmental bodies, voluntary organisations (e.g. T.O.R. rescue) and NGOs (e.g. Slovak Red Cross) as well as individuals take an important part in civil protection.

As one especial feature of the civil protection system in Slovakia, in crisis and emergencies legal persons are allowed to provide services of own civil protection units to the district offices and municipalities.

Annually, the Republic of Slovakia spends approximately 0.007 percent of the GDP for Civil Protection. The largest share is taken by the Ministry of the Interior, which expends the second largest amount of its budget to rescue services.

At the operational level, the long-established Voluntary Fire Brigades are an integral part of the Slovak civil security system and perform important tasks in the response to disasters.

Table of Contents

SLOVAKIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1406
Overview	1407
Table of Contents	1408
List of Figures	1410
List of Tables.....	1410
List of Abbreviations.....	1411
1 Policy	1412
1.1 Risk Assessment.....	1413
1.2 Policy and Governance	1414
1.2.1 Strategy scope and focus	1415
1.2.2 Monitoring and analytical support to policy making; R&D	1415
1.2.3 Policy for Prevention	1417
1.2.4 Policy for Preparedness	1417
1.2.5 Policy for Response	1418
1.2.6 Policy for Relief and Recovery	1418
1.3 Financing.....	1418
1.3.1 Investing in preparedness	1418
1.3.2 Investing in consequence management	1419
1.4 Policy review, Evaluation & Organisational Learning	1419
1.4.1 Post-Disaster Assessment	1419
1.4.2 Departmental Lessons Learned systems	1420
1.4.3 Centralised (national) Lessons Learned system	1420
1.4.4 International exchange for Lessons Learned	1420
1.4.5 Regular policy reviews	1420
1.5 Resilience	1420
1.6 Information sharing and data protection	1421
2 Legislation	1423
2.1 Crisis (emergency, disaster) management concept.....	1423
2.2 General crisis (emergency, disaster) management law.....	1423
2.3 Emergency rule	1424
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1425

2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1426
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1426
2.7	Legal regulations for international engagements of first responders and crisis managers	1426
3	Organisation	1427
3.1	Organisational chart.....	1427
3.2	Organisational cooperation	1429
4	Procedures	1431
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1431
4.2	Operations Planning.....	1431
4.3	Logistics support in crises	1432
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1432
5	Capabilities	1434
5.1	Human resources	1434
5.2	Materiel (non-financial) resources	1435
5.3	Training	1436
5.4	Procurement	1436
5.4.1	Procurement regulation	1436
5.4.2	Procurement procedures	1437
5.5	Niche capabilities	1437
	Resources	1438
	Legislative acts	1438
	Official documents (white papers, strategies, etc.)	1438
	Online resources (e.g. websites of key CM organizations)	1438
	Publications	1439
	Expert interviews	1440

List of Figures

<i>Figure 1: Partial Monitoring System</i>	<i>1416</i>
<i>Figure 2: Organisational Chart of civil protection agents</i>	<i>1428</i>

List of Tables

<i>Table 1: Slovakian Crisis Management Structure.....</i>	<i>1413</i>
<i>Table 2: List of Crises in Slovakia (2000 – 2012).....</i>	<i>1414</i>
<i>Table 3: Security and Defence Budgets</i>	<i>1418</i>
<i>Table 4: Ministry of Interior Budget Breakdown</i>	<i>1418</i>
<i>Table 5: Overview on operational forces for protection and rescue activities in Slovakia</i>	<i>1435</i>

List of Abbreviations

CEI	Central European Initiative
DM	Disaster management
DO	District Office
EM-DAT	Emergency Database
ERCC	Emergency Response Coordination Centre
EU	European Union
IRS	Integrated Rescue System
MIC	EU's Monitoring and Information Centre
MoI	Ministry of the Interior
NATO	North Atlantic Treaty Organization
OECD	Organisation for Economic Co-operation and Development
RSPG	Radio Spectrum Policy Group
SOP	Standing operating procedures
SRC	Slovak Red Cross
UN	United Nations
VFB	Voluntary Fire Brigades

1 Policy

Slovakia is a unitary state (republic) with a parliamentary system. The Parliament is unicameral, consists of 150 deputies and is called The National Council of the Slovak Republic (Národná rada Slovenskej republiky). The political system of the country is based on proportional representation. Since its independence in 1993, Slovakia has had experience with coalitions where one party dominated, as well as with the fragility of large coalitions. Institutional elements were taken from the German/ Austrian neo-corporatist model. Therefore, the system can rather be described as consociational. However, it is often pointed out that the Slovak reality is largely distant from the ideal model of consociational democracy. (Brazova et al. 2013)

In 1996 a new system of the regional and district division was introduced. In 1999, the government initiated a new round of reforms of public administration. In 2000, a Conception on Decentralization and Modernization of Public Administration was approved. The aim was to decentralize competencies to the self-governmental bodies, to de-concentrate competencies from central administrative bodies to local state specialized administration and to decentralize finances. In 2002, a new regional self-government system was created (consisting of eight self-governing regions). Currently, the country is divided into eight regions (Banskobystrický, Bratislavský, Košický, Nitrianský, Prešovský, Trenčianský, Trnavský, Žilinský – all of them have between 500,000 and 800,000 inhabitants) and 79 districts. There are 2,890 municipalities out of which 138 have the statute of a town. (Slovak Statistical Office online)

In another round of reforms starting in 2004, regional offices of the state administration were abolished and new district offices of state administration were introduced and specialized state administration at the regional level strengthened. Starting from January 2013, the specialized state administration bodies at the regional level (such as Office for the Environment or for Road Traffic and Communications) were abolished and their agenda integrated in district offices (a part of the state administration). (Brazova et al. 2013)

In Slovakia, currently the so-called parallel model of public administration exists, i.e. the state administration is completely separated from self-government. District offices and district offices in the seat of regions are now bodies of state administration, budgetary bound to the MoI. They are active also in the field of civil protection. The responsibility for civil security and crisis management rests mostly with the state administration. The legislative and main administrative competences rest on the national level with respective ministries, especially the MoI.

Despite the de-concentration and decentralization in public administration, the civil security system is rather centralized, although municipalities (bodies of self-governance) have an important place in the system of crisis management: they are the final link of public administration and the first one in contact with citizens. They can also declare an “extraordinary situation”, which has been the case with many local floods and heavy snowfalls. Principles of subsidiarity and the related up-scaling take place according to the territorial spread of a crisis event.

In case of a crisis, the government establishes a central crisis staff (the head is thereof the minister of interior) which coordinates activities of state administration bodies and self-governing bodies (The Act of the National Council of the Slovak Republic No 387/2002 Coll. on Crisis Management of the State in War and Warfare). The ministries are responsible for civil security planning and decide about measures to deal with crisis situations. These measures are executed by the district offices in the seat of region which in turn coordinate activities of district offices and municipalities. The district offices

then execute measures to deal with the crisis situation and coordinate activities of municipalities. At the lowest level, municipalities execute measures to deal with the crisis situation and they demand assistance from the district office (DO).

Table 19: Slovakian Crisis Management Structure

Source: Brazova et al. 2013 accessed: July 19th, 2014.

<i>Administrative level</i>	<i>Crisis management authority</i>	<i>Consultative and advisory body, participates at crisis management</i>	<i>Crisis Management Centre</i>
Centre	Government, the Prime minister	National Security Council (esp. Committee for Civil Emergency Planning)	Central crisis staff (head is the minister of interior)
Ministries and other central administration bodies; Slovak National Bank	Minister, head of the central administration body	-	Departmental crisis staffs
Region	Chief of the DO in the seat of region (<i>Prednosta Obvodného úradu v sídle kraja</i>) State administration	Security Council (Headed by the chief of DO; members include a police, fire-fighter and army representative)	Crisis staff of the DO in the seat of region
District	Head of the DO (<i>Prednosta</i>) State administration	Security Council	Crisis staff of the DO
Municipality	Mayor (<i>starosta</i>) Self-governing body	-	Crisis staff of the Municipality

1.1 Risk Assessment

Among other things the Ministry and the state administration authorities focus on risk analysis and risk assessment methodologies. The key risks are possible leakage of radioactive substances caused by accidents in nuclear power plants, possible leakage of dangerous chemical substances caused by accidents in chemical plants and in the course of their transport, threats of terrorist attacks and floods.

As stated by Brazova (Brazova et al. 2013), the most frequent crises that occur in Slovakia, in the independent history of the country from 1993, are caused by extreme weather conditions. Although industrial and transportation disasters do occur (such as a coal mine explosion in 2009 or explosion at military repair facilities in 2007), they are comparatively less important than natural disasters in terms of the number of people affected (EM-DAT online).

The typical crisis which regularly tests the civil security system preparedness is the flood. The most important one which also demonstrated the weaknesses of the system was the flood of 2010. As explained by ICPDR (ICPDR 2012), the extreme floods were recorded mostly in May and June. Altogether there were 206 days of flood alerts until the end of August (85 percent of the time) and the floods affected the whole territory of the Slovak Republic. Extreme flood events, which resulted from long-lasting rainfalls in the beginning of June, occurred in several river basins of the Central Slovakia.¹⁹⁵⁹

It revealed that the Integrated Recue system (IRS) was not sufficiently ready to deal with consequences of a large-scale event at the central level for a long period of time. After this experience, the government approved a new conception of the IRS and its operation in January 2011.

¹⁹⁵⁹ 2010 Floods in the Danube River Basin, www.icpdr.org

Table 20: List of Crises in Slovakia (2000 – 2012)

Source: Brazova et al. 2013; accessed: July 19th, 2014.

Year	Crisis description	Crisis category		Damage	
			# of persons killed	# of persons injured	# of persons affected
2000	Wildfire (in Spišská Nová Ves district)	Natural Disaster	7		
2001	Flood (Bodrog, Poprad, Hornád, Ondava, Topľa, Laborec and Torysa rivers)	Natural Disaster	1		
2003	Bus crash near Úhorná	Transportation accident	11	24	
2004	Flood (esp. Ondava river)	Natural Disaster	1	230	2004
2004	Storm (esp. in Tatra mountains)	Natural Disaster	2	24	10,300
2005	Flood (esp. Ondava, Laborec, Hornád rivers)	Natural Disaster	1		
2006	Army plane crash	Transportation accident	42	1	
2006	Flood (esp. south-east of the country)	Natural Disaster	1		100
2007	Extreme temperature	Natural Disaster	1	89	
2007	Explosion at military repair facilities	Miscellaneous Accident	11		
2009	Coal mine explosion in Handlová	Industrial Accident	20		
2009	Gas crisis (outage of gas supplies)	Infrastructure failure/ Other			NA
2009/2010	Flu H1N1	Infectious disease	56		1210
2010	Extreme temperature (heat wave)	Natural Disaster	122		
2010	Flood (whole territory)	Natural Disaster			850
2011	Medical doctors' shortage	Other			NA
2012	Extreme temperature (extreme frost)	Natural Disaster	5		

1.2 Policy and Governance

The Central crisis headquarters and crisis headquarters of the county and district offices fulfil their tasks in accordance on “Management of state in crisis situations except war and warfare”. The central crisis headquarters coordinates the activities of the bodies of the state management, of the bodies of the territorial self-administration and other compounds dedicated to the solution of crisis situation within the period of crisis situation. The minister of the interior is the head of the central crisis headquarters. The structure of the central crisis headquarters is stipulated by its statute, which is approved by the Government of the Slovak Republic (National Report in preparation for World Conference of Disaster Reduction 2004).

1.2.1 Strategy scope and focus

The aims of civil protection, as specified in the Act on Civil Protection of the Population (1994), are to protect the lives, health and property of the population and create conditions for survival under extraordinary circumstances and during the declared emergency situation.

An additional objective is to cooperate with the corresponding institutions of other countries in order to be able to provide coordinated emergency assistance. The Slovak civil protection is responsible for the following tasks¹⁹⁶⁰:

- *The organisation, management and execution of rescue, containment and elimination activities, especially those involving search and rescue operations, provision of paramedical and medical care, release of trapped persons and transportation of injured*
- *The organisation and provision of warning and information services*
- *The provision of emergency supplies and shelter*
- *The provision of refuge and evacuation*
- *The implementation of radiation and chemical protection measures*
- *The organisation and training of the civil protection forces, and the training of citizens in self-protection and self-assistance*
- *The evaluation and location of buildings according to land-use building procedures and the observation of the technical parameters of civil protection facilities.*

According to the Expert Interview (2014), crisis management is provided strategically in all phases – prevention, preparedness, response and recovery. In the area of natural disasters, there the focus is laid on preparedness and prevention. The main legal scope which expresses crisis management in terms of the Slovak republic is a constitutional act no. 227/2002 about security of state in case of war, warfare, state of emergency and emergency.

1.2.2 Monitoring and analytical support to policy making; R&D

Partial Monitoring System – Geological Factors

Systems of monitoring along with information system are important tools to ensure the quality of the environment. At the same time they provide the basis for decision-making on the current and future activities in the field of the environment. The environmental monitoring is a systematic, time/space defined observation of the characteristics of the environment compounds (usually in points, forming a monitoring network), with a certain degree of power to represent the area under study, and in summary, a larger territorial unit. The monitoring provides objective knowledge of the characteristics of the environment and their changes in the area under study. Partial Monitoring System - Geological Factors is a component of the Monitoring System of the Environment of the Slovak Republic. The focus is mainly in the so-

¹⁹⁶⁰ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-2.html

called geological hazards, i.e. harmful natural or anthropogenic geological processes that threaten the natural environment and, ultimately, humans. The more and more adverse effects of natural forces formed the central issue in recent years, i.e. the number of incidents, disasters that have a negative impact on the lives and health of people or their property; in particular, recurring floods and landslides. The results of monitoring provide information to adopt appropriate and timely measures to prevent the incidents.¹⁹⁶¹

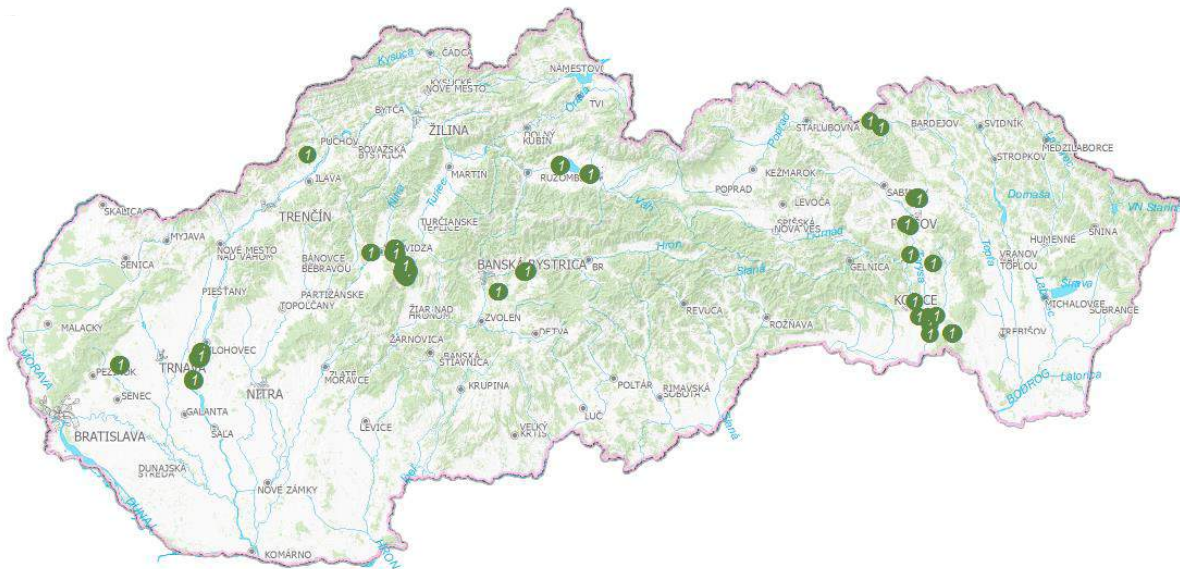


Figure 28: Partial Monitoring System

Source: <http://mapserver.geology.sk/monitoring/>; accessed: September 21st, 2014.

The monitoring of the geological environmental factors of the Slovak Republic is seen as multi-component, integrated and open system. Separate objects of monitoring are divided into the following subsystems¹⁹⁶²:

1. Landslides and other slope failures
2. Tectonic and seismic activity of the territory
3. Anthropogenic sediments of the environmental loads nature
4. Impact of mining upon the environment
5. Monitoring of the radon bulk activity within the geological environment
6. Stability of rock masses below historic objects
7. Monitoring of fluvial sediments
8. Volume unstable soils¹⁹⁶³

In addition, civil protection includes the complementary activities necessary for performing the above tasks, such as planning, organisation and provision of material and technical resources as well as inspections. These civil protection tasks shall continue to apply if a state of increased preparedness has been declared. The scope of the tasks is stated in the Decree on the

¹⁹⁶¹ http://www.geology.sk/new/en/sub/ms/cms_en

¹⁹⁶² Information available at: http://www.geology.sk/new/en/sub/ms/cms_en; accessed: November 2nd, 2014.

¹⁹⁶³ http://www.geology.sk/new/en/sub/ms/cms_en

Classification of the Territory of the Slovak Republic issued by the Government of the Slovak Republic.¹⁹⁶⁴

Radiation monitoring

Radiation monitoring of environmental components in case of emergency, release of radioactive substances leak in the Slovak Republic is organized by the Slovak Centre of Radiation Monitoring Network (Institute of Preventive and Clinical Medicine Bratislava). An important role in monitoring has the civil protection authority, which operates three monitoring systems:

1. Monitoring system based on radiometers RSPG¹⁹⁶⁵ with continuous measurement, evaluation and storage of results according to a reset mode. This system enables an automatic notification and builds the base for an emergency declaration, if the limit value is exceeded. The system consists of 23 stations allocated in the Slovak Republic.
2. The monitoring system based on dosimeters DC - 4C and DC - 4D, which is designed for monitoring and evaluation of radiation situation after the use of nuclear weapons. This system is activated, if necessary, with the possibility of using after the nuclear facilities accidents.
3. The monitoring system based on gamma spectrometric measurements of soil samples from predetermined points throughout the territory of the Slovak Republic. Samples are evaluated by the chemical control laboratory of the civil protection authority.

1.2.3 Policy for Prevention

Disaster prevention is part of the civil protection system. Coordination and cooperation are included within the general mission and tasks of civil protection.¹⁹⁶⁶

1.2.4 Policy for Preparedness

A variety of organisations and departments at national level are involved in DM. Most of these institutions were geared towards flood disasters, some of them being exclusively dedicated to deal with mitigation and preparedness for landslides and avalanches.

The legal bases of disaster preparedness for natural hazards in Slovak are:

1. The Constitution of the Slovak Republic
3. The Slovak Water Act (Nr. 364/2004)
4. The Slovak Flood Protection Act (Nr. 666/2004)
5. The water Framework Directive 2000/60/ EC
6. Directive of the European Parliament and of the Council on the assessment and management of flood risks (2007/60/EC)
7. Bilateral agreements
8. International water management plan 2006-15.

¹⁹⁶⁴ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-2.html

¹⁹⁶⁵ More information at: <http://rspg-spectrum.eu/>; accessed: November 21th, 2014.

¹⁹⁶⁶ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-3.html

1.2.5 Policy for Response

The 50 district offices are primarily responsible during civil emergencies. The Departments of Civil Protection and Crisis Management at the district offices plan, manage and provide the activities relative to the protection of the civil population in the case of emergencies. They can make use of employees at plants, factories and public legal institutions within their territory. When carrying out civil protection tasks, the MoI cooperates with state bodies, municipalities, legal entities and individuals as well as public-legal institutions with a humanitarian mission that are deployed in rescue operations in case of emergency (for example the Association of Rescue Services, the Mountain Rescue Service, the Slovak Red Cross etc.).¹⁹⁶⁷

1.2.6 Policy for Relief and Recovery

According to the European Commission (2014), the Government also manages the recovery of the effects of major natural and other disasters, and supervises the work of various ministries in the sphere of civil protection.

1.3 Financing

1.3.1 Investing in preparedness

The civil protection expenditures are approximately 0.007 % of the GDP.¹⁹⁶⁸

Table 21: Security and Defence Budgets

Source: Kratky 2010. "Slovakia Security Sector Overview" British Security Industry Association.

Institution	Budget 2011 (EUR million)	Budget 2010 (EUR million)
Slovak Intelligence Service	38.95	43.31
Ministry of Defence	739.77	822.94
Ministry of Interior	860.61	838.57
Ministry of Justice	291.42	270.03
National Security Authority	7.99	8.80
Total Security Budget	1,938.74	1,983.65
as % of State Budget	11.45%	12.19%
Total State Budget	16,936.06	16,276.99

Table 22: Ministry of Interior Budget Breakdown

Source: Kratky 2010.

Ministry of Interior Budget	€ million	%
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¹⁹⁶⁷ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-1.html#over

¹⁹⁶⁸ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-1.html#over

Spending - 2010		
Emergency services	90.34	10.78%
Public Security (Police)	674.02	80.42%
Public Administration	73.8	8.81%
Total Budget	838.16	100.00%

1.3.2 Investing in consequence management

According to a personal communication with experts from the Slovak Ministry of Interior, Section of Crisis Management, regular systematic budget allocations for Disaster Reduction are estimated to reach 2,5 % of the total local budget allocation. Disaster prevention and risk reduction are the priorities of the parliament, through which they can reduce the loss of human life, as well as the amount of funds needed to deal with disasters.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

As stated by the Expert Interview (2014), each emergency is evaluated and depending on its range, measures are taken by the body of crisis management in the area of civil protection or humanitarian aid. The main document that provides the basis for the post-disaster assessment is an analysis of a territory of the Slovak republic, which informs amongst others, people about possible risks.

According to Brazova et al. (2013) the analyses of operation were usually conducted at the regional level during the floods of 2010,. The Košice region can serve as an example- one of the most severely affected by the crisis. Already during the flooding event, the causes of the critical developments were analysed and evaluated. The activities of the crisis management bodies were subject to analysis at three levels: crisis staff, self-government of Košice and the EVA commission. The analyses showed that there were not enough persons to fulfil the tasks of civil protection and crisis management at the District Office (DO) level. Insufficiencies also appeared in the technical material and in the evacuation of ill and immobile persons. Generally, most of the results of the analyses stressed either a lack of financial resources or imprecision in the relevant legislation, rather than to point to a personal responsibility. These analyses led to changes on the local level, e.g. the crisis management unit at the DO level was strengthened. At the central level, after the 2010 floods and after a temporary fall-out of emergency lines in January 2011, the decision to reform the IRS was made. Although there was consensus about the need of this reform (to be finished in 2015), some disagreement exists between the current minister of interior and his predecessor on which bodies should be the leading ones.

As stated by the ANVIL Study (2013), no analyses have been conducted in the case municipalities in particular and self-governing bodies in general. So far, no objective and comprehensive evaluation of the conduct of self-governing bodies during rescue works has been conducted following any floods in the country's history. The mayors of municipalities are often seen as the weakest link by some practitioners in dealing with crisis.

1.4.2 Departmental Lessons Learned systems

Brazova et al. (2013) stated that the analysis of the floods in 2010 was conducted at the regional level, where the region of Košice was examined exemplarily. An evaluation of the performance of crisis management bodies was done by the crisis staff, the self-government of Košice and the EVA Commission. As a result, a lack of human resources for Civil Protection and Crisis Management, an insufficiency of equipment and deficits of evacuation performance became evident. Insufficient financial resources were considered as a main source of problem (Brazova et al. 2013).

1.4.3 Centralised (national) Lessons Learned system

The development of measures in the aftermath of emergencies and the implementation of experiences is in the competence of state administration bodies, which are cooperating together. The supreme body of Slovak republic is the government of the Slovak republic. Individual participants are allocating information that is needed on vertical or horizontal level. The connectivity of the system of crisis management and European Union is secured by the national contact points (Ministry of Interior of the Slovak republic, Ministry of the Defence of the Slovak republic and Ministry of Foreign Affairs of the Slovak republic (Expert Interview 2014)). Investigations of the floods in 2010 and the temporary fall-out of emergency lines in 2011 caused a reform the IRS, because of its inconsistency in command and control.

1.4.4 International exchange for Lessons Learned

As indicated by the Expert Interview (2014), the Slovak republic is participating in international practices, providing humanitarian aid, exchanging of experts and educating through courses in the community mechanism and through participation at specific missions. Slovak republic is cooperating with other partner states and providing important information that is needed.

1.4.5 Regular policy reviews

It was explained within the Expert Interview (2014), Crisis management and its origin of improvement is a day by day process, which involves evaluation of specific measures in the actual crisis situations. Structures of state and local government are one of the participants on those crisis situations.

1.5 Resilience

Slovak republic understands the concept of resilience as the analysis of territory of the Slovak republic. In case European Union requests the analysis of territory, Slovak republic is able to provide the analysis. In this regard is a possibility of understanding the legislation of Slovak republic in this way: plans of protection of citizens, plans of providing assistance and other standards are as concept of resilience (Expert Interview 2014). Therefore, Standards of ISO have been applied ad-hoc, and if it's needed en-bloc.

The concept of resilience in civil protection, in terms of county's capacity is to withstand shocks due to natural and other disasters, to rebuild itself with efficiency and to improve on the pre-existing state wherever possible, has not been explicitly established in the Slovakian Republic by law or other normative act.

According to the WDRC-Report (2004) the Slovakian Government has adopted in response to past flood Disasters the resolution No. 31 of January 19, 2000 by which the Master Plan was approved. It identifies several of flood-protective measures and its part is the project “Flood Warning and Forecasting System of the Slovak Republic” (POVAPSYS) which is aimed at the considerable innovation of the flood warning and forecasting practices. The Slovak Hydrometeorological Institute (SHMU) was made responsible for it. SHMU prepared a POVAPSYS was approved in February 2002 by the Ministry of Environment of Slovak Republic. The main aim of POVAPSYS is to develop a tool which would make possible to reduce the damage to life and property to those who might be affected by floods in future. Experience shows that it may be in a catchment, small of large, within the reach of flood waters. It is evident that achievement of this aim will increase substantially the quality of life of the local population by granting them more safety against flooding. It will also comply with the Directive on water 2000/60/EC of the European Parliament and of the Council of 23 October, 2000 which defines the framework of the Community for national water policy.

The following main components of the Project are listed below:

- Integrated management system
- Ground meteorological data monitoring system
- Hydrological data monitoring system
- Telecommunication network
- Satellite data receiver
- Radar network and lightning detection system
- Meteorological and hydrological forecasting methods and models
- Staff training.

1.6 Information sharing and data protection

The National Security Authority¹⁹⁶⁹ is responsible for the protection of classified information. It provides support in domain of information security and information systems certification, crypto-security and crypto-certification, personal security, R&D, and administrative security for the Slovak Republic.

The Expert Interview indicated, that the Slovak republic has transposed legal acts as sensitive, reserved, secret, and top secret in the area of information sharing. In case of vulnerability of critical infrastructure legal acts are transposed and used under very strict rules.

The WDRC Report (2004) states that on the base of bilateral agreement between the Austrian Ministry of Agriculture, Forestry, Environment and Water-Management and the Slovak Ministry of Environment Austrian side gave into the ownership of the Slovak side an automatic aerosol monitor AMS-02 including container and weather station. The Slovak Ministry of Environment provides the Austrian Ministry of Agriculture, Forestry, Environment and Water-Management with the reading of this monitor, free of charge, for at least 2 years and vice versa, the Austrian side gives the readings of the Austrian aerosol monitors to the Slovak Ministry of Environment free of charge. At present national monitoring centre in Bratislava-Koliba is connected via ISDN with Jaslovské Bohunice and Austrian centre providing the data exchange. In the frame of Unit database of radiation data in the Slovak Republic, SHMI cooperates with other partners like: Slovak Army, Civil Defence, Ministry of

¹⁹⁶⁹ Available at <http://www.nbusr.sk/en/>; accessed: November 2nd, 2014.

Health, Slovak Power Plants. At present bilateral data exchange with Slovak Army is running and with other partner is prepared.

International Data Exchange

SHMI cooperates with European Commission Joint Research Centre in Ispra in the frame EURDEP (European Union Data Exchange Platform). At present the Slovakian Republic uses the data exchange with EC JRC new version of format EURDEP 2.0. Data is sent from the monitoring network on ftp server of SHMI every 24 hour and then the data are downloaded to database in Ispra.

Austria

Data between SHMI and Radiation Warning Centre Vienna are exchanging by means of directories on the radiation monitoring server of SHMI. Every 10 minutes data from 336 Austrian stations are stored into the directory on our server and then inserted onto the radiation database. Every 10 minutes data from monitoring network are stored to the directory on server on the Slovakian side and then downloaded to the Austrian side.¹⁹⁷⁰

Hungary

On the base of agreement between the Hungarian Ministry of Environment, Hungarian Ministry of Interior and the Slovak Ministry of Environment, SHMI started the data exchange with Hungary Meteoservices in summer 2002. Data files with the radiation data in the EURDEP 2.0 format are exported from the Slovakian database every 10 minutes and then files are downloaded to the server in Meteoservice Hungary.¹⁹⁷¹

Slovakia is able to use volunteers (plan of providing integrated rescue system and coordination with volunteer organisations, which has the status – other rescue units in Slovak republic. Simple volunteers are used depending on their powers and resources and ability of intervention. Due to the fact, that Social media is not a transparent and reliable tool in case of crisis situations; there is no intent to use it.

¹⁹⁷⁰ http://www.sazp.sk/iszp/nastroje/ism_us/2/radiation/04.html

¹⁹⁷¹ http://www.sazp.sk/iszp/nastroje/ism_us/2/radiation/04.html

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In line with Brazova et al. (2013) the most current legal framework governing the civil security system was established in 2002. Since then, however, the respective acts have been subject to many changes. Competencies and responsibilities in the field of civil security are all legally institutionalized. The statutory basis of civil security in Slovakia does not rest upon a single law or provision. The Slovak Republic has also a security strategy which tackles crisis management issues. The system consists of a multi-faceted complex comprising foreign policy, economic, defence, internal security, social, rescue, and environmental instruments and their mutual links.¹⁹⁷²

2.2 General crisis (emergency, disaster) management law

The main act regulating security is the Constitutional Act on National Security of the State in War, the State of War, State of Exception and State of Emergency (Act Nr. 227/2002 Coll.). The country adopted this legislation for the first time in 2002. Since then, this act has been changed three times. The last change took place in 2006 (agreed upon in November 2005) and introduced a new threat to the list of threats, namely a pandemic – especially a flu pandemic but also any other pandemic caused e.g. by a terrorist attack with biological weapons. The previous two changes were reacting to the reform of public administration and to the reform of Slovak military forces, respectively. (Brazova et al. 2013)

Another crucial regulation is the Act on Management of State in Crisis Situations Other Than War and State of War (Act Nr. 387/2002 Coll.), specifying the authority of different bodies of public administration when dealing with crisis situations. Prior to the adoption of this act in 2002, no complex regulation existed. Competencies of public administration bodies, municipalities, as well as of private and legal persons in case of crises had been always stipulated only by a particular provision concerning a particular type of crisis (e.g. Act on Protection against Fires or Act on Civil Protection). (Brazova et al. 2013)

According to Brazova et al. (2013) the Act on Civil Protection of Population (Nr. 42/1994 Coll.) is somewhat older from 1994. Among other things, this regulation states tasks and authority lines of public administration bodies, as well as rights and obligations of natural and legal persons while ensuring civil protection. Also, the principles of warning and their specification are provided by this act. Since 1994, this regulation has been subject to a change fourteen times, the last taking place in 2012. From the point of view of civil security, the last interesting change to this act occurred in 2011, when the authority of the MoI was broadened so as to include professional education on civil protection. Also, the competencies of self-governing regions were broadened regarding the establishment of a crisis fund from which reparation costs after an extraordinary event can be covered. In the same year, by another change, the “threat to public health of a second degree” was introduced to the list of extraordinary events. (Act Nr. 172/2011)

The next important regulation is the Act on IRS (Nr. 129/2002 Coll.). This reacted to the need to coordinate various rescue services as the number of incidents was growing, where not only one but

¹⁹⁷² The security strategy of the Slovak Republic could be found under: <http://www.mosr.sk/data/files/795.pdf>

more different rescue agencies were needed simultaneously. The inspiration for such a system and for its coordination centres was taken from Austria, Germany and the Czech Republic. Also this act has been subject to change eight times so far, mostly due to changes in other related legislation. In 2011, the government approved a new Conception of the Operation of IRS. The Conception envisages a new delimitation of competencies and organizational changes at all levels of management¹⁹⁷³ and thus also further changes in the respective legislation might be expected.

2.3 Emergency rule

As stated by Brazova et al. (2013), there are legally defined special states which can be declared during a crisis. The least intensive – and the most often declared one – is the extraordinary or “emergency situation” (mimoriadna situácia) in which the IRS is used. Within the Constitution of the Slovak Republic, no specific circumstances have been provided for emergency rule. In contrast, the ordinary legislation refers to different types of emergency rule, such as the state of military alert, natural disasters and catastrophes. In a majority of cases, however, there are different types of emergency rule to deal with different kinds of emergencies in proportion to the gravity of the situation (Khakee 2009).

As stated by Khakee (2009), the President of the Republic declares a state of emergency or a state of war on proposal of the government, which should take its decision collectively. In the Slovak Republic, this is contingent up on the passage of a special constitutional law by the National Council (Parliament) which requires a three-fifths majority of all deputies (EUROPEAN COMMISSION FOR DEMOCRACY THROUGH LAW 1995). It is incumbent on the president to decide, when a state of emergency or a state of war shall come to an end.

The “state of emergency” can be declared by the government (only for the affected area), when lives and health of people are immediately threatened; or when property values are significantly threatened under natural disaster, catastrophe or industrial or other accident (Act Nr. Nr. 227/2002 Coll.; art. 5, sec.1). So far, this has been the case in 2011 when there was an acute shortage of medical doctors.

The “state of exception” has not been used in Slovakia so far. It can be declared by the president (on governmental proposal) in the following cases: terrorist attack, large-scale street unrests involving attacks on public authorities, looting or other mass attacks on property, and other mass violent unlawful action (ibid.; art. 4). Since 1993 (Slovak independence), civil protection (civilná ochrana) has been directed by the MoI. A clear distinction between internal and external security exists. Both of these spheres are ruled by their own legislation and have different leading agencies (MoI responsible for civil security; Ministry of Defence for any deployment of armed forces). The military serves as a secondary body in the IRS, i.e. it does not belong to its basic bodies (Act Nr. 129/2002 Coll.). Usually, the help of the military and its equipment is required when dealing with crisis situations. For example, heavy snowfall in Prešov in February 2013 meant that an “extraordinary situation” was declared. The city asked then the army to provide equipment necessary to clear away the snow (Frank 2013).

As emphasised by the EUROPEAN COMMISSION FOR DEMOCRACY THROUGH LAW (1995), despite the absence of constitutional provisions guaranteeing certain fundamental human rights and freedoms under emergency rule, Art. 15 of the European Convention on Human Rights would fully

¹⁹⁷³ Available in Slovakian language at:

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=19089>; accessed: 21st November 2014.

apply in such a situation, since Article 11 of the Slovak Constitution states that "international instruments on human rights and freedoms ratified by the Slovak Republic and promulgated under statutory requirements shall take precedence over national laws provided that international treaties and agreements guarantee greater constitutional rights and freedoms".

As stated by Brazova et al. (2013) there were 109 emergency situations registered at the Mol in 2011. Most of these were floods, leakages of dangerous substances or large traffic accidents. In most cases, these were local emergencies with emergency situations declared at municipal or local (district) level.

The crisis legislature and particularly the Act on Civil Protection stipulate the rights and obligations of the population in the state of a crisis. An individual has the right of warning, evacuation, sheltering, for obtaining relevant information on civil protection, and to immediate help when his/her life is threatened, as well as his/ her health and property. Individuals also have the right of education in civil protection with the aim of self-help learning and the ability to help others in need (Act Nr.42/1994 Coll.). (Brazova et al. 2013)

According to Brazova et al. (2013) a for legal obligations individuals are required to participate in the tasks of civil protection. When there is an emergency situation, people are legally required to follow the instructions of local offices, municipalities, and other legal entities as defined by law. Citizens are also legally obliged to carry out measures to protect food, water, animals, and feed which are in their possession or were entrusted to them. Natural persons are obliged to fulfil duties in civil protection units and to be prepared for these duties in advance. People also can be asked to participate in (time-limited) works which aim at the protection of life, health and property.

An obligation also exists for natural persons to provide material means which are in their possession (after the crisis, these are returned or refunded) and to provide room for emergency accommodation for the people affected by an emergency situation or to people conducting the rescue works. Legal persons are legally obliged to cooperate with district offices and municipalities in civil protection. They also can – based on their own judgment – establish civil protection units. Legal persons are further obliged to provide warning for their employees and to provide material means which are in their possession to the state administrative bodies or to municipalities for the preparedness for civil protection and during emergency situations.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

As summarised at the VADEMECUM Web-Site (2014):

At ministerial level¹⁹⁷⁴

- Order No 75/1995 Coll. on the Provision of Evacuation, as worded in later instructions
- Order No 523/2006 Coll. on the Provision of Rescue Operations and Organisation of Civil Protection Units, as worded in later instructions.

Inter-ministerial cross-cutting coordination

Government regulations:

¹⁹⁷⁴ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-1.html

- Regulation of the Government of the Slovak Republic No 130/1994 Coll. on Single Extraordinary Compensation for Injury or Death in Respect of the Protection of the Population, as worded in later instructions
- Regulation of the Government of the Slovak Republic No 166/1994 Coll. on Categorisation of the Slovak Republic's Territory, as worded in later instructions.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

At regional level

- Directions of the Mol and methodological instructions of the Section on Crisis Management and Civil Protection of the Moil to the district offices stipulating the conditions of specific tasks in the civil protection field.

At local level

- The Act of the National Council of the Slovak Republic No 42/1994 Coll. on Civil Protection of the Population, as worded in later amendments including the tasks at local level.¹⁹⁷⁵

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Although the state plays a dominant role, also some private bodies regularly participate in the provision of civil security. Private (for-profit) companies especially dominate in the field of health provision. The Health System Reform (agreed by the government in 2004) included complete privatization of health rescue services. The aim was to introduce market principles into the public health provision and to decentralize management and ownership of the health services. The role of the Ministry of Health was weakened. The main driver of this reform was economization of activities. (Brazova et al. 2013)

Currently, the providers of medical and health emergency services are linked together in the Association of Rescue Health Service Providers and the Association of Rescue Health Services, with 17 and 11 members (respectively). Also the formerly state-owned Medical Emergency Services has been transformed into for-profit companies. The Air Health Rescue Service operates on the same basis – the company Air Transport Europe operates seven centres.

Enterprises can establish their own fire-fighting and civil protection units. The company Flack Fire Services provides (since 2007) fire-fighting company brigades to large industrial enterprises (such as chemical plants or car factories). It also organizes and mediates educational and training programs in the field of fire protection for Slovak and Czech enterprises (Flack Fire Services online).

2.7 Legal regulations for international engagements of first responders and crisis managers

International intervention is governed by political agreements (EU, UN, NATO, CEI¹⁹⁷⁶, Visegrad Group¹⁹⁷⁷).

¹⁹⁷⁵ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-1.html

3 Organisation

3.1 Organisational chart

According to the European Commission (2014), for the formulation in the area of civil security, the Mol¹⁹⁷⁸ is mainly responsible. The bodies responsible for crisis management, according to the current legislation, are the government of the Slovak Republic, ministries, National Bank, district offices at the seat of region (State administration bodies at regional level), district offices (State administration bodies at lower (district) level) and municipalities. The government commands and controls the ministries in terms of crisis management and decides about both asking for and providing foreign assistance (Act Nr. 387/2002 Coll.). In practice, the level which is meant primarily to respond to crises is the regional level. Here, the prominent position is held by the district offices in the seat of region which are managed/ led by the Mol. The role of the state administration in this field remains crucial.

In line with Brazova et al. (2013) the most important body to civil protection is the Mol. It approves the composition and size of expenses of the district offices for civil protection (which is financed through the Mol budget). At lower level, the role of the district offices in the seat of region is important as these bodies declare the “emergency situation” at the level of region and they lead rescue works in such case. At an even lower level, the district offices are tasked with leading the rescue works if these are not in competency of any other body (e.g. when an emergency situation is declared at a higher level) (Act Nr. 42/1994). In the field of civil protection – unlike in the case of crisis management – some more space is given to the self-governing regions. These can e.g. establish a crisis fund to finance a potential damage. Yet, the obligation to do so does not exist. The regions cooperate with state administration bodies in civil protection. They do not have any special or individual tasks to perform on their own. Municipalities are more involved in both crisis management and civil protection. Municipalities can and do declare emergency situations. They also create civil protection units from the citizens of the municipality.

Criticism exists that the legislation does not respect the experience of lower administrative bodies (both state and self-governing ones), most importantly their responsibility to the citizens. Also, the responsibilities of the fire rescue brigades are not entirely clear while leading rescue works before the lead is taken over by a state administration body. Responsibility is stated by the legislation only implicitly. The public administration reform did not affect the crisis management capabilities directly. Especially the replacement of regional crisis management bodies by strengthening of district offices in the seat of region is criticized as not conceptual. Moreover, the legal principles of functioning of the crisis staffs at the municipal, district and regional level remain unclear. The competencies and crisis management tasks of state administration and self-governing bodies are overlapping in large cities. (Brazova et al. 2013)

¹⁹⁷⁶ More information at: www.cei.int/; accessed: November 19th, 2014.

¹⁹⁷⁷ More information at: www.visegradgroup.eu/; accessed: November 17th, 2014.

¹⁹⁷⁸ The Mol's Section on Crisis Management and Civil Protection is responsible for the administration of civil protection in cooperation with public authorities and municipalities.

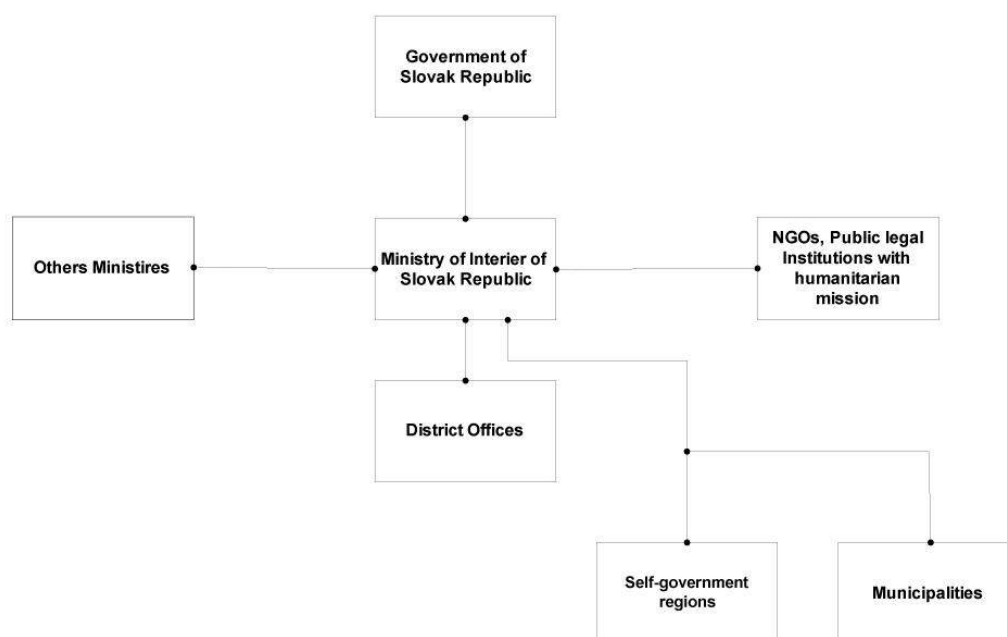


Figure 29: Organisational Chart of civil protection agents

Source: http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-1.html#orga; accessed: November 1st, 2014.

As indicated by the ANVIL report (2013) the civil security system has been practically provided by the so-called IRS since 2002. This is an operating platform to respond to crises within which operate: the Mol, Health Ministry, district offices in the seat of region and rescue bodies. The main leading and coordinating role is endowed to the Mol. Expenditures on the IRS are financed from the state budget through the budget of the Mol (Act Nr. 129/2002). The rescue bodies of the IRS are divided into three parts: basic rescue services, other rescue services and the police corps. The basic rescue services are: fire rescue brigades, health emergency services, inspecting chemical laboratories, Mountain Rescue Service, and Mining Rescue Service. Among the Other rescue services belong e.g. army, municipal fire brigades, municipal police, civil protection units, Slovak Red Cross (SRC) and others.

The main level of operation of the IRS is the regional level: The district offices in the seat of region establish a so-called Coordinating Centre (in place since 2003). Its operators are representatives of regional state administration, of Ministry of Health and of the Fire Rescue Brigade. The Centre ensures warning of the population. It also coordinates the actions of the rescue services within the IRS and gives orders to the respective (basic or other) service of the IRS to intervene. When the forces of the rescue services at the regional level are not sufficient to handle a crisis, the Coordinating Centre asks assistance from other regions through the Mol.

So far, floods have been dealt with at the regional level as the highest level. During the 2010 flood, many regions called an “emergency situation” (e.g. the chief of the DO in the seat of Košice Region in eastern Slovakia declared an “emergency situation” for the whole region during the 1st of June to the 25th of June because the forces and means of the state administration did not suffice any more for providing rescue and protection at the municipal and district level).

The floods of 2010 have shown that the IRS is not sufficiently ready to deal with a crisis in the whole country for a longer period of time (Brazova et al. 2013). In reaction hitherto, the government approved of a new conception of the IRS in 2011. The Mol also pointed to the malfunctioning of

some technical components of the IRS and to the absence of emergency plans. Also the cooperation among and operation of some bodies was problematic. For example the Fire Rescue Brigade was performing its professional duties but it was leaving broader civil security tasks to the civil protection bodies. Generally, the professional fire rescue brigades (due to their capacities) did not represent a decisive force in the rescue actions.

During the 2010 floods, municipalities remained “alone” for some time. The district offices’ (DO) staff and the IRS were not able to be everywhere and priorities had to be set. The forces and facilities of professional rescue bodies were not sufficient; the armed forces were not able to be in every village. The staffing of civil protection and crisis management units of the DO proved to be insufficient. Also there were problems in the coordination of humanitarian help. The cooperation on the side of the municipalities was problematic: these did not observe the obligation to update the higher levels of administration about the current situation. Also this case was said to show-case the inadequacy of legislation in the field of crisis management and civil protection: the position and competencies of leading agencies and bodies were not clear. Currently, the lack of financial resources illustrates a big challenge.

3.2 Organisational cooperation

As stated by Brazova et al. (2013), Slovakia has established bilateral cooperation with all its neighboring countries (the Czech Republic, Poland, Hungary, Austria and Ukraine). Other countries with which Slovakia has bilateral agreements for so-called extraordinary situations are: Croatia, Russia, Slovenia and Montenegro (Mol online). Multilateral agreements on cooperation in the cases of crises include the Central European Initiative (CEI) – an agreement on cooperation in anticipating, preventing and mitigating natural and technological disasters between the governments of Austria, Croatia, Hungary, Italy, the Republic of Slovenia (signed 1997; effective since 2000), and the UN/DHA project on the use of military and civil defense capacities in rescue operations.

Slovakia has also signed regional and multilateral provisions. It is a member of the Council of Europe, EU, NATO, OSCE and the UN. In terms of civil security, under the Visegrad Group take place regular meetings of the directors general for civil protection and disaster management. Also within the Salzburg Forum (a Central European governmental initiative on internal security) the establishment of a National Logistic Centre for humanitarian aid in Bratislava was discussed in February 2012. This could be used for providing help abroad as well as when national need arises. There is regional cooperation with Poland (Operation Program Poland – Slovakia), developing a common system of civil protection against natural disasters (Mol online). (Brazova et al. 2013)

After the storm damaging large forest areas in the High Tatra, the deputy prime minister of Slovakia requested financial help from the EU’s Solidarity Fund to finance part of the damage removal activities. During heavy floods in April 2006, Slovakia urgently requested 150,000 sand-bags from NATO’s Euro-Atlantic Disaster Response Coordination Centre. Within this mechanism, Austria, Croatia, Germany and Poland delivered the requested sand-bags. In the case of Poland, this help was provided through the EU-MIC mechanism¹⁹⁷⁹.

In 2010, when floods hit all of central Europe, the ministers of Slovakia, Poland and the Czech Republic agreed to cooperate. The Czech rescue workers (members of the firefighting brigade of the

¹⁹⁷⁹ More information available at: <http://reliefweb.int/report/slovakia/eadrcc-final-report-floods-slovak-republic>; accessed: November 12th, 2014.

Moravskoslezský Region and of the rescue corps of the firefighting brigade) were sent to Slovakia upon request of the Slovak government. The aim was to conduct a rescue operation in the district of Trebišov in eastern Slovakia.¹⁹⁸⁰

Due to the fact, that the most frequent emergencies in Slovakia are natural disasters, these events will be addressed as a priority.

¹⁹⁸⁰ More information available at: <http://www.usar.cz/webmagazine/subcategories.asp?idk=293>; accessed: November 6th, 2014.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

According to the Journal of South Asian Disaster Studies (2010), the territory of Slovakia from the geographic location and geomorphologic characteristics' point of view was often exposed to natural hazards in the past. Since 1990, the periodicity of occurrence of natural hazards such as floods, landslides, and avalanches seem to increase. Most of dangerous natural phenomena in Slovakia occur in mild and moderate scale.

Slovakia has the *International Water Management Plan from 2006-15* for rivers and lakes separately but not for ground and coastal water. There are separate action plans for different categories of disasters in Slovakia. The National Action plan for disaster preparedness acted in different years (1992 through 2006). Now, all disaster preparedness projects to move ahead by ECO, the Water Resources Strategy 2000, are sectorial plan and polices that take care of Natural disasters relating to floods and landslides at national level. The building code of 2001 was brought in to mitigate the effects of earthquakes in urban areas and as a measure towards earthquake preparedness. The Government of Slovak Republic in 2001 has approved The National Program of Flood Protection till 2010 as part of the project 'Flood Warning and Forecasting System of Slovakia (POVAPSYS)'. The European Federation of Geologists (EFG) established panels of experts to provide high quality response to the European Commission and Parliament. Recently, the EFG expert panel on natural hazards was approached to provide additional input to the 7th Framework Programme, to be able to identify a strategic research agenda for the natural hazards sector. Organization of hazard prevention and public education developed as well and helped to minimize the risk. However, climatic changes increase extremes in precipitation influencing local storms, landslides, erosions, and sedimentations.

There is a document called "Analysis of a territory of the Slovak republic", which builds the basis for the SOPs. SOPs are based on generally accepted standards which are regularly exercised (Expert Interview 2014). Operations planning is a common procedure of all stakeholders on national and local level.

4.2 Operations Planning

Since 2002, the civil security system in Slovakia has been practically provided by the so-called IRS. This is an operating platform to respond to crises within which operate: the MoI, Health Ministry, district offices in the seat of region and rescue bodies. The main leading and coordinating role is endowed to the MoI. Expenditures on the IRS are financed from the state budget through the budget of the MoI (Act Nr. 129/2002).

Other rescue services belong e.g. army, municipal fire brigades, municipal police, civil protection units, Slovak Red Cross (SRC) and others. The main level of operation of the IRS is the regional level: The district offices in the seat of region establish a so-called Coordinating Centre. Its operators are representatives of regional state administration, of Ministry of Health and of the Fire Rescue Brigade. The Centre ensures warning of the population. It also coordinates the actions of the rescue services within the IRS and gives orders to the respective (basic or other) service of the IRS to intervene. When the forces of the rescue services at the regional level are not sufficient to handle a crisis, the Coordinating Centre asks assistance from other regions through the MoI (Brazova et al. 2013).

4.3 Logistics support in crises

The Slovak Republic has a specific mechanism to deal with disasters arising from relevant legal acts (the Act of the National Council of the Slovak Republic on Civil Protection of Population, the Concept of Organization and Development of Civil Protection by 2015, Act on Management of the State in Crisis Situations except for the Wartime and Hostilities, Act on Integrated Rescue System, Act on Fire Protection, Act on Mountain Rescue Unit, Act on Flood Protection and the other operational documents including Territory Emergency Analysis, Population Protection Plan, Evacuation Plan, Plan of material and technical equipment of civil protection units, documentation for radiological, chemical and biological measures). In accordance with the Act on Armed Forces of the Slovak Republic the armed forces can be utilized in order to provide necessary logistical support at the request of state bodies, municipalities and higher territorial units which charge the armed forces with task regarding protection, assistance and cooperation with the aim to eliminate consequences of natural disasters, catastrophes and accidents threatening human lives or property.¹⁹⁸¹

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The government of Slovak republic is responsible for crisis communication and crisis management. Crisis communication runs between all interested subjects and Ministry of Interior takes care of voice and data system. Ministry of Interior is responsible for notification and warning of the citizens. As stated by the Expert Interview (2014), information for citizens is secured by warning system – sirens via voice communication means, local radio and etc. Warning signals of civil protection are used in the situation when notification and warning of the citizens is needed.

Brazova et al. (2013) found out, that the primary method of informing the public about an immediate crisis is through the use of sirens. Two different tones are distinguished: the “general threat” (všeobecné ohrozenie) and the “water threat” (ohrozenie vodou). The end of the threat or the end of the emergency is announced by a special signal “the end of threat” (koniec ohrozenia). Warning signals as well as the ending signal are further enhanced by information through the mass media. There is a special tone for the test of the sirens and the public is informed about the test through the media. The tests are coordinated by the Mol and are conducted four times a year, always in an exactly stipulated date and time (Act Nr. 42/1994 Coll.). In Slovakia, a notification network of civil protection exists. This is amended by an independent system of warning and notification which is provided by legal persons (e.g. chemical plants) who might endanger life, health or property of people through their activities. Starting from February 2013, a new governmental decree on warning entered into force. In reaction to advances in telecommunication, the state is now responsible to ensure warning of the entire permanently inhabited territory (earlier, 80 percent was the compulsory coverage area) by electronic sirens or other means. On the entire territory of Slovakia, thus, public telecommunication networks, mass-media, local wireless radio and electronic services of mobile providers can also be used for warning. An “emergency situation” is called on and called off through the mass media. The natural and legal persons who operate radio and TV broadcasting are legally obliged to publish information on a crisis and on the measures related to the provision of help. They are obliged to do so free of charge, upon request of the Coordination Centre (Act Nr. 129/2002). So far, the use of Internet for the informing of the public has not been large. Similarly, the use of social

¹⁹⁸¹ <http://www.ohchr.org/EN/HRBodies/HRC/AdvisoryCommittee/Pages/HRCACIndex.aspx>

media has not been extensive. The government's office as well as the MoI Facebook pages have been established only recently (e.g. the Facebook page of the MoI was set up on November 7, 2011) and have not served as a means of updating the public on crisis so far (the Facebook page of the MoI contains only one entry about an emergency situation: in Košice from 24.5.2012. In April 2013, this page was "liked" by 895 Facebook users).

5 Capabilities

5.1 Human resources

An official agreement between the MoI of the Slovak Republic and the Slovak Red Cross (SRC) on cooperation and assistance was signed on 22 November 2010. The SRC is a non-state organization which is exclusively accepted as a helping organization of the Military Medical Service. It is active in the field of civil protection and provides help during catastrophes, natural disasters, etc. It also organizes and mediates aid during catastrophes both within and outside of the Slovak territory. SRC is a part of the IRS and a member of the Central Crisis staffs at both central and local levels.

The number of SRC members (74,906) is relatively high. Basic organizational units of the SRC are local societies (1160), which join in larger territorial units (38 in total). The number of local societies is very high (e.g. 53 in the city of Košice; 44 in Nitra). At the top of the organization is the Central Secretariat of the SRC. A specific organization is the Water Rescue Service of the SRC. The overall number of SRC volunteers was 18,699 in 2011, out of which 2,255 were ready in crisis situations. In 2010 (the year of large floods), there were 26,606 registered SRC volunteers (2,306 ready in crisis situations) (Brazova et al. 2013).

Other NGOs have different positions compared to the SRC. These organizations are e.g. the Samaritan Association of the Slovak Republic (founded in 2005; currently having approx. 100 voluntary members), the Tatra Mountain Service (specialized at rescue and preventive-educational activities in the High Tatra mountains territory), the Mountain Service in Slovakia (search and rescue works) and the Mountain Service of Pieniny National Park (rescue and preventive-educational activities on the territory of Pieniny National Park). Due to their specialization and territorial location, these mountain services were not much involved during the 2010 flood. The Samaritan Association helped e.g. in the Kežmarok District providing logistics of supplies and medicine to people on territories made inaccessible by torn-down bridges (Hužiková, undated).

Over the last years, also the organization Modrý anjel (Blue Angel) has gained in importance. It specializes in crisis intervention (i.e. in dealing with crises in their acute state). It started its operation under a European Social Fund project aimed at providing psycho-traumatic first aid with the medical rescue services. Currently, the organization has 53 members. It has assisted in most of the large-scale crisis events (e.g. after the explosion in a military repair facility in 2007; during the 2010 floods). It was directly activated by the MoI after the coal mine explosion in 2009 (Modrý anjel online).

A very important voluntary organization is the VFB (established in 1922), whose main tasks include (besides regular fire-fighting) civil protection and education of voluntary fire-fighters. Currently, there are 2,478 VFB in Slovakia, consisting of some 90,000 members. These organizations form district and territorial boards of voluntary fire protection based on the territorial principle. There are also eight regional boards based on a principle of delegation (Dobrovoľná požiarna ochrana SR online).

As explained by Brazova et al. (2013), in the face of an emergency, the VFB provides rapid response at the site. Although, a better equipment might be desirable, their contribution to civil protection gained consideration during the floods in 2010.

As indicated by the ANVIL report (2013):

Other voluntary organization specializing in civil security are the T.O.R. RESCUE¹⁹⁸² from the town of Prešov (its main tasks being search and rescue actions during natural disasters) and the Dog Rescue Slovakia (established in 2000, specialized in search works). Beside this, a number of organizations and charities are partially involved in the civil security system too – by establishing money collection in the aftermath of crises. For example ADRA Slovakia organized such a collection after the 2010 flood and provided alimentation for 300 evacuated people.

Table 23 provides an overview on operational forces for civil protection activities.

Table 23: Overview on operational forces for protection and rescue activities in Slovakia

Source: Kratky (2010).

Stakeholder Type	Name	Number of Personnel
Voluntary Organisation	Fire Rescue Service (Employed + Volunteers)	90,000
	Mountain Rescue	120
	Slovak Red Cross (Employed + Volunteers)	130,000
Agency/Department	Czech Armed Forces	13,539
	Police	22,288
Total		255,947

5.2 Materiel (non-financial) resources

Among non-financial sources include organ compositions crisis management components of the IRS. Those reserves are located in the humanitarian aid store fuel reserves throughout the territory of the Slovak Republic (Expert Interview 2014). Specific resources from the military are deployed as needed. If necessary, it can be ordered in kind or personal assistance. Specific resources are also used by private operators.

Although floods have so far been the major disasters in Slovakia, they have never led to a declaration of an “emergency situation” or “state of emergency” at the central level. However, help from abroad was requested (and received) through NATO’s Euro-Atlantic Disaster Response Coordination Centre after floods in 2006 (sand-bags) and through bi- or tri- lateral cooperation within central Europe in 2010 (Czech Firefighters helping to deal with floods).

So far, a state of emergency has been declared once, when medical doctors were massively leaving to the Czech Republic in 2011: From the 29th of November to the 8th of December, 2011, a state of emergency was declared (see also chapter 5.1). The reason was that approximately 1,200 Slovak medical doctors left their jobs in a joint protest organized by the medical unions on the 1st of December, 2011. In summary, a state of emergency was declared for 13 districts and 15 hospitals were affected. Under the state of emergency, it was possible to order the doctors to be on so-called ‘labor duty’. However, even these measures were not entirely sufficient to provide full medical care in Slovakia. The government of the Czech Republic was asked by the Slovak government to send in help in the form of 30 military doctors. Help was also offered from the Austrian Ministry of Health which offered to accept patients from Slovakia in emergency cases in Austrian hospitals (Czech Press

¹⁹⁸² T.O.R. rescue is a voluntary organization, which includes rescuers, divers, cragsmen.

Agency 2011). In the end, the Slovak medical unions and the Slovak government reached an agreement and signed a common memorandum which put an end to the crisis.

A large crisis dealt with at the central level also occurred in January 2009. A “state of emergency in gas industry” was declared when there was a 70 percent reduction (later on growing to 100 percent) in deliveries of Russian gas due to a Russian-Ukrainian dispute. A crisis staff at the level of the Ministry of Economy was established relatively early to deal with the situation. The reserves previously thought to be fully sufficient but proved to be inadequate. The Slovak population was not directly affected, yet the government decided to reduce gas supplies to some one thousand selected enterprises. The Slovak prime minister asked his Czech counterpart for help. Some 6.3 million cubic meters of gas were then provided to Slovakia daily until the crisis was over. (Brazova et al. 2013)

5.3 Training

Training exercises are performed at all levels, educational activities, achieving proficiency in the field of CO, special courses and regular courses in European courses within the framework of the Community mechanism (Expert Interview 2014).

Ministries are responsible for the provision of education in the field of civil protection and training at all types of schools in the country. Civil preparedness is then realized at lower levels and also funded and organized by the self-governing regions. These cooperate with regional media which publish or air especially useful articles, footage of model exercises, etc. A legal obligation is given to the district offices to exercise (and if needed, to change) the plan of civil protection. This has to be done at least once every three years (Act Nr. 42/ 1994 Coll.).

The education in the Slovak public administration is organized hierarchically: Mol coordinates education and preparedness of the crisis staffs of Slovak ministries and of crisis staffs of the district offices in the seat of region. The latter ones, in turn, organize professional preparedness (education) of the crisis staffs of district offices. These organize the education of crisis staffs of municipalities.

People who are trained are employees who fulfil the tasks of civil protection and crisis management in the state administration, self-government and legal entities as well as individuals, entrepreneurs, directors and teachers of elementary schools and high schools. The centres of education and training are located in Slovenska Lupca, Nitra, Limbach and Spišská Nova Ves, which are an organisational part of the Section on Crisis Management and Civil Protection. National exercises programmes are included into the annual action plans of the Section on Crisis Management and Civil Protection. Yearly staff exercises are held at regional and district levels, examples include Košice 2005, Stropkov 2006, Airport 2008 and Fercekovce 2008.¹⁹⁸³

5.4 Procurement

5.4.1 Procurement regulation

In Slovakia, the Act on Public Procurement regulates the procurement including open procedure, restricted procedure, and negotiated procedure with or without prior notification and competitive dialogue (Bianchi & Guidi 2010), only design contest was not covered. For the procurement of services, it is sufficient to publish it in national e-Journals of Public

¹⁹⁸³ http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk-3.html

Procurement and contract award notices will be published in the national e-Journal and the EU Official Journal.

The Office for Public Procurement and the Supreme Control Office at the Ministry of the Finance are the supervision bodies for the control of public procurement.

5.4.2 Procurement procedures

According to OECD (2007), the Slovak Republic has a centralised structure for Public Procurement, established at the Office for Public Procurement. The Council of Ministers is the competent authority for drafting of the primary and secondary legislation, advisory and support of operations, international co-ordination, monitoring and control publications and information promote the professionalization and strengthening the capacities as well as complaints review and remedies.

5.5 Niche capabilities

As stated by Brazova et al. (2013) the expectations of the public towards the government are relatively high. The fire rescue brigades are highly trusted. People are willing to volunteer both spontaneously as well as in an organized way. The most important civil organization here is the Voluntary Fire Brigades (VFB). It was considered as an integral part of the Slovak civil security system. Brazova et al. (2013) emphasised, that this long-established organisation play an important role at the operational level by performing necessary tasks in order to response to disasters. Besides regular fire-fighting, civil protection and education of voluntary fire-fighters are well established. The VFB are often the first to arrive and to respond to a crisis

It was stated, that the Mayors of municipalities are supposed to take an important role in response, nevertheless they are unprepared. Although, the rescue teams of the Slovak Republic exhibits a good performance in the field of chemical, biological and radiation threats.

Resources

Legislative acts

Constitutional Act on the Security of the Czech Republic (No. 110/1998 Sb.), 1998 (as amended by Constitutional Act No. 300/2000 Sb.), Ústavní soud (OG). Available at: <http://www.usoud.cz/en/constitutional-act-on-the-security-of-the-czech-republic/>; accessed: September 21st, 2014.

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OECD, Nuclear Legislation in OECD and NEA Countries, Slovak Republic. Available at: <https://www.oecd-nea.org/law/legislation/slovak.pdf>; accessed: September 13th, 2014.

Martina Zelenáková. 2001. "Flood risk assessment and management in Slovak Republic". Available at: <http://www.svf.tuke.sk/erasmusip/Zelenakova.pdf>; accessed: September 13th, 2014.

Online resources (e.g. websites of key CM organizations)

Slovak Statistical Office <http://app.statistics.sk/mosmis/sk/run.html>
Vademecum for Civil Protection, 2014.
http://ec.europa.eu/echo/files/civil_protection/vademecum/sk/2-sk.html; accessed: October 14th, 2014.

Slovakia, ReliefWeb <http://reliefweb.int/country/svk>
EM-DAT (online), www.emdat.be/

IFRC - Disaster Law Data Base: <http://www.ifrc.org/publications/disaster-law-database/>;
<http://ifrc.org/en/what-we-do/disaster-law/news/europe/>

GripWeb <http://www.gripweb.org/gripweb/?q=early-warning-systems-catalogue>;
<http://www.gripweb.org/gripweb/?q=disaster-database>

Prevention Web <http://www.preventionweb.net/english/countries/statistics/?cid=156>

UNISDR <http://www.unisdr.org/partners/countries/svk>
MoI (online), <http://www.minv.sk/?ministry-of-interior>

Nuclear Safety, www.ebrd.com/pages/sector/nuclearsafety.shtml

Institute of Hydrology, Slovak Academy of Science, www.ih.savba.sk/

Water Research Institute of Slovakia, http://www.vuvh.sk/index.php/en_US/uvod

Ministry of Defence, <http://www.mosr.sk/ministry-of-defence-of-the-slovak-republic/>

State Geological Survey of the Slovak Republic, <http://www.geology.sk/new/en>

Modrý anjel <http://modryanjel.webnode.sk/o-nas/>

Dobrovoľná požiarna ochrana SR <http://www.dposr.sk/>

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Expert interviews

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

SLOVENIA

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Valeri Ratchev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by AIT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

According to official documents¹⁹⁸⁴ and reports,¹⁹⁸⁵ Slovenia is threatened by a variety of natural hazards, mostly earthquakes, floods, landslides, hail, storms, sleet, frost, and fire. The country has one nuclear power plant and a large industrial sector that operates dangerous substances – a potential source of ecological damages and catastrophic accidents.

The recent civil protection system has been constructed after 1992 by means of the adoption of a number of legislative acts and organisational reforms. The core characteristic of the civil protection system of Slovenia is that protection against natural and man-made disasters has been separated from the national defence system. This way, an integral and functionally unified system has been established based on common goals and principles. However, the main administrative and co-ordination structure for civil protection – Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR) is a constituent body of the Ministry of Defence.



Figure 30: Symbol of the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR).¹⁹⁸⁶

Conceptually, the civil protection and rescue system is one of the three pillars of national security along with the defence system and the internal security system. However, “civil protection” in Slovenia is a relatively narrow concept; it includes very specific range of activities, commanding and co-ordinating bodies and specialised units for interventions and rescue in emergencies.

The system is built at three levels – national, regional and municipality. Functionally the focus is on regional capabilities and local authorities, supported by the state. Commercial entities, civil organisations and citizens have legally prescribed important functions for prevention, monitoring, alarming and responding to any extreme developments. Volunteering has a long lasting tradition in Slovenia.

Key civil protection stakeholders are the National Assembly, the Government, particular ministers, and the civil protection service that includes commanders, headquarters and heads of intervention and rescue units, and the local authorities. The administrative and specific expert tasks related to protection against natural and other disasters are carried out by the ACPDR, which is a multi-sectorial and coordinating body.

¹⁹⁸⁴ For example see *Doctrine on Protection, Rescue and Relief. Government of the Republic of Slovenia*, 2002, <http://www.sos112.si/db/priloga/p4359.pdf>.

¹⁹⁸⁵ For example see *Republic of Slovenia National Report and Information on Disaster Reduction for the World Conference on Disaster Reduction*, Kobe-Hyogo, Japan, 18-22 January 2005, available at <http://www.unisdr.org/2005/mdgs-drr/national-reports/Slovenia-report.pdf>.

¹⁹⁸⁶ Web site of the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief www.sos112.si/eng/.

The units of the Slovenian Armed Forces and the Police are to carry out protection and rescue tasks related to their training and equipment. Their participation in protection and rescue operations is decided upon by the government and in emergency cases by the respective ministers at the request of the Commander of Civil Protection of the Republic of Slovenia.

Republic of Slovenia allocates annually approximately 0,5 % of the national budget for protection against natural and other disasters, while local authorities dedicate 3 % of municipal budgets for that purpose. In addition, fire protection is financed partially from the “fire fund,” generated from a fire insurance taxation.¹⁹⁸⁷

¹⁹⁸⁷ GHK, *Strategic Evaluation of Environment and Risk Prevention under Structural and Cohesion funds for the period 2007-2013. National Evaluation Report for Slovenia. Executive Summary* (Brussels: Directorate General Regional Policy, 2006).

Table of Contents

SLOVENIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1441
Overview	1442
Table of Contents	1444
List of Figures	1446
List of Tables.....	1446
List of Abbreviations.....	1447
1 Policy	1448
1.1 Risk Assessment.....	1449
1.2 Policy and Governance	1460
1.2.1 Strategy scope and focus.....	1460
1.2.2 Monitoring and analytical support to policy making; R&D	1462
1.2.3 Policy for Prevention	1465
1.2.4 Policy for Preparedness.....	1465
1.2.5 Policy for Response	1466
1.2.6 Policy for Relief and Recovery.....	1466
1.3 Financing	1467
1.3.1 Investing in preparedness	1467
1.3.2 Investing in consequence management.....	1469
1.4 Policy review, Evaluation & Organisational Learning	1470
1.4.1 Post-Disaster Assessment.....	1470
1.4.2 Departmental lessons learned systems.....	1471
1.4.3 Centralised (national) lessons learned system.....	1472
1.4.4 International exchange for lessons learned	1472
1.4.5 Regular policy reviews.....	1473
1.5 Resilience	1473
1.6 Information sharing and data protection	1474
2 Legislation	1475
2.1 Crisis (emergency, disaster) management concept.....	1475
2.2 General crisis (emergency, disaster) management law.....	1476
2.3 Emergency rule	1478

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1479
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1479
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1480
2.7	Legal regulations for international engagements of first responders and crisis managers	1480
3	Organisation	1482
3.1	Organisational chart	1482
3.2	Organisational co-operation	1486
4	Procedures	1489
4.1	Standing Operating Procedures (SOPs) and Guidelines	1489
4.2	Operations planning	1490
4.3	Logistics support in crises	1492
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1492
5	Capabilities	1494
5.1	Human resources	1494
5.2	Materiel (non-financial) resources	1497
5.3	Training	1498
5.4	Procurement	1500
5.4.1	Procurement regulation	1500
5.4.2	Procurement procedures	1501
5.5	Niche capabilities	1502
	Resources	1504
	Legislative acts	1504
	Other normative acts	1504
	Official documents (white papers, strategies, etc.)	1505
	Online resources (e.g. websites of key CM organizations)	1505
	Publications	1506

List of Figures

<i>Figure 1: Symbol of the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR).</i>	1442
<i>Figure 2: Construct of the Slovenian National Security System.</i>	1449
<i>Figure 3: Population delivery vis-a-vis probabilistic assessments of seismic activities of 7, 8, and 9 level on MCS scale.</i>	1451
<i>Figure 4: Seismic Hazard Distribution Map.</i>	1452
<i>Figure 5: Seismic zones in Slovenia (Seismological Institute of the Republic of Slovenia, 1991).</i>	1453
<i>Figure 6: The biggest rivers in Slovenia that cause most dangerous floods.</i>	1454
<i>Figure 7: Flood hazard in Slovenia.</i>	1455
<i>Figure 8: Landslide susceptibility map of Slovenia.</i>	1455
<i>Figure 9: Avalanche threat in the Republic of Slovenia.</i>	1456
<i>Figure 10: Slovenian nuclear facilities.</i>	1458
<i>Figure 11: Main sources of risks due to major accidents involving dangerous substances (DS).</i>	1460
<i>Figure 12: Monitoring, notification and warning sub-system.</i>	1463
<i>Figure 13: Regional notification centres</i>	1464
<i>Figure 14: Organisational chart of the Slovenia's disaster management system.</i>	1483
<i>Figure 15: Lines of communication.</i>	1483
<i>Figure 16: Pictures from training polygons at the Centre for Civil Protection and Disaster Relief of the Republic of Slovenia.</i>	1500

List of Tables

<i>Table 1. Number of natural and other disasters and incidents in Slovenia for 2014.</i>	1450
<i>Table 2. The most damaging natural disasters in Slovenia.</i>	1450
<i>Table 3. Most powerful earthquakes on the territory of Slovenia.</i>	1451
<i>Table 4. Natural disasters and response operations in 2014.</i>	1457
<i>Table 5. Radiation exposure of the adult population in Slovenia due to global contamination of the environment with artificial radionuclides in 2014</i>	1459
<i>Table 6. Use of Slovenian Armed Forces helicopters for search and assistance in 2013-14.</i>	1486
<i>Table 7. Levels of disaster management planning.</i>	1491
<i>Table 8. State level Civil Protection personnel.</i>	1494
<i>Table 9. Civil Protection members by regions (2008).</i>	1495
<i>Table 10. Education and training on protection against natural and other disasters.</i>	1499

List of Abbreviations

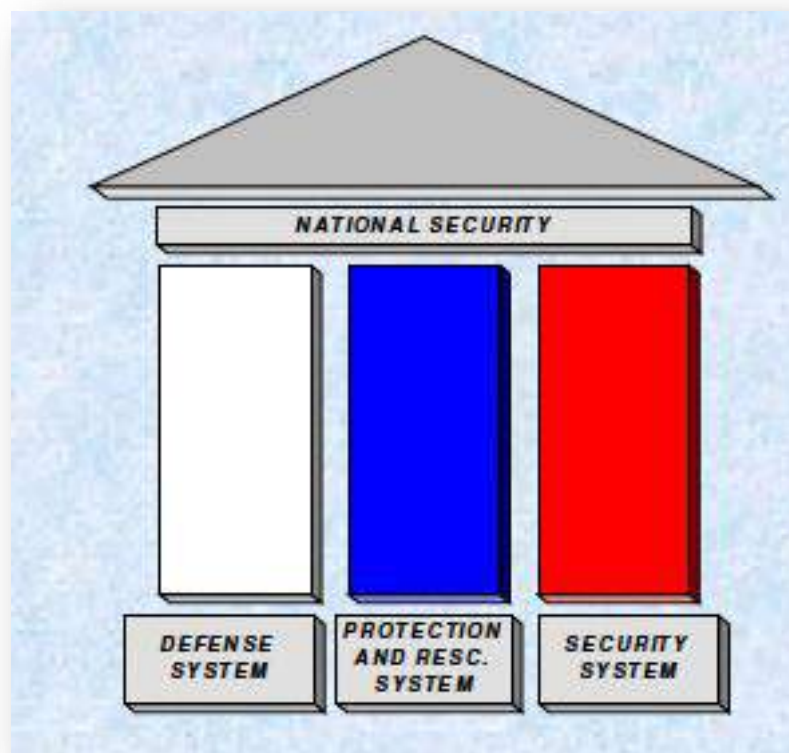
ACPDR	Administration (of the Republic of Slovenia) for Civil Protection and Disaster Relief
ARAO	Agency for Radwaste Management
CISF	Central Interim Storage Facility
CMAS	World Underwater Association
CRED	Centre for Research of the Epidemiology of Disasters
DPPI SEE	Disaster Preparedness and Prevention Initiative for South Eastern Europe
DUNJA	Sound Alarm Management and Triggering System
EM-DAT	Emergency management data base
EU	European Union
FCI	International Canine Federation
GDP	Gross Domestic Product
GIS-Ujme	Geographic Information System
IKAR	International Mountain Rescue Commission
IRO	International Rescue Dogs Organisation
JSI	Jožef Stefan Institute
LILM	Storing Low- and Intermediate- Level Wast
MCS	Mercalli-Cancani-Sieberg scale
MoD	Ministry of Defence
NATO	North Atlantic Treaty Organization
NRC	National Review Commission
OECD	Organisation for Economic Co-operation and Development
OJSR	Official Journal (Gazette) of the Republic of Slovenia
RCB	Radiological, chemical and biological (protection)
RIC	Reactor Infrastructure Center
SEE	South-eastern Europe
SOP	Standing operating procedures
UNISDR	United Nation's Office for Disaster Risk Reduction
WOSM	World Organisation of Scouting Movements

1 Policy

According to a study of the public opinion on threat perceptions, "... the great majority of adult citizens in Slovenia feel safe and secure."¹⁹⁸⁸ However, serious natural disasters during the last decade made them increasingly aware of ecological, natural and man-made emergency. The governments reflect the growing public demands for improving the preparedness and rapid reaction capabilities, making civil protection one of the pillars of national security policy.

The National Security Strategy¹⁹⁸⁹ explains civil protection policy as a component of the national security policy along with foreign, defence, and internal security policies.

The social context of civil protection in Slovenia is the nation's long lasting tradition in volunteering in cases of emergencies like fires, avalanches in the mountains, and floods. Despite the separation of the civil protection system from the defence system, Slovenians strongly perceive (above 80 %) an important military role in cases of emergency.¹⁹⁹⁰



¹⁹⁸⁸ Gerhard Kummel, Giuseppe Caforio and Christopher Dandeker (eds.), *Armed Forces, Soldiers and Civil-Military Relations* (Wiesbaden: VS Verlag für Sozialwissenschaften, 2009), p. 137.

¹⁹⁸⁹ Resolution of the National Security Strategy of Slovenia, Ljubljana, 2010, http://www.mo.gov.si/fileadmin/mo.gov.si/pageuploads/pdf/ministrstvo/RSNV2010_slo_en.pdf.

¹⁹⁹⁰ Ljubica Jelušič, "Slovenian Public Opinion on Security, Defence and Military Issues," in *The Public Image of Security, Defence and the Military in Central and Eastern Europe*, edited by Marija Vlahova (Belgrade: DCAF & CCMR, 2003).

Figure 31: Construct of the Slovenian National Security System.¹⁹⁹¹

1.1 Risk Assessment

According to the National progress report on the implementation of the Hyogo Framework for Action (2013-2015), Slovenia has adopted (2014) a Regulation implementing the Decision on the Mechanism of the Union in the field of civil protection. It "...determines the form, content and method for making individual risk assessments at the state level, risk assessment for individual hazards on local level, national risk assessment, the method of adoption and deadlines."¹⁹⁹² According to the same report, "[r]isk assessment for individual types of disasters is based on the Instruction for Conducting Risk Assessment, which serves as a basis for all risk assessments. The Administration of the Republic of Slovenia for Civil Protection and Disaster Relief is responsible for risk assessment for individual natural or other disasters, which affect the entire or parts of the national territory while risk assessment at the local level is performed by the competent municipal bodies."¹⁹⁹³

Natural and man-made disasters are between the focal points of the Slovenian National Security Strategy. The document points out that, "[n]atural disasters, which pose greatest risks to the Republic of Slovenia are earthquakes, floods, storms, droughts, major wildfires, and massive outbreaks of infectious diseases in human, animals, and plants."¹⁹⁹⁴

The Doctrine for Protection, Rescue and Relief (2002) determines that, "the main sources of dangers and threats of natural and other disasters are inadequate encroachment on the environment, pollution, military threats, terrorism, and other non-military sources of threat."¹⁹⁹⁵ Regarding the technological hazards, the Doctrine underlines that the industrial and transportation accidents, as well as those that are results of malicious attacks are of particular importance.

As a country, which is independent only since 1991, Slovenia continues to develop its system for hazards, risks and vulnerabilities mapping. In the EM-DAT database, hazards data of Slovenia is available only from 1995 onwards.¹⁹⁹⁶ However, as the preventive aspect of civil protection has been determined as a security policy priority, systematic efforts in this direction have been undertaken.

The Ministry of Defence's Annual Report for 2014 accounts for over 14500 disasters and incidents in Slovenia in 2014, grouped in eight main categories (see Table 1).¹⁹⁹⁷

A) Natural hazards

According to the Brussels-based Centre for Research of the Epidemiology of Disasters (CRED), earthquakes, extreme temperatures and storms cause the deadliest natural disasters.

¹⁹⁹¹ Romana Slabe (MoD – ACPDR), Presentation at an international roundtable in Sofia, 2009.

¹⁹⁹² Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, Ministry of Defence, *National progress report on the implementation of the Hyogo Framework for Action (2013-2015)* (PreventionWeb, 2015), p. 2. Available at http://www.preventionweb.net/files/41665_SVN_NationalHFAprogress_2013-15.pdf.

¹⁹⁹³ Ibid, p. 13.

¹⁹⁹⁴ National Security Strategy of the Republic of Slovenia (2010), Art. 4.3.2.

¹⁹⁹⁵ Doctrine on Protection, Rescue and Relief.

¹⁹⁹⁶ International Disasters Database at the Centre for Research of the Epidemiology of Disasters (CRED), available at <http://www.emdat.be/database>.

¹⁹⁹⁷ Ministry of Defence, Annual Report for 2014. http://www.mo.gov.si/fileadmin/mo.gov.si/pageuploads/pdf/ministrstvo/annual_report_2014.pdf.

Obviously, in terms of fatalities, the most dangerous proved to be extreme temperatures and earthquakes. For the period of the last 35 years, the average number of disasters per year is respectively, 0.03 and 0.06. The floods and storms cause the most serious material and financial damage, with an average appearance of 0.06 storms and 0.03 floods per year.¹⁹⁹⁸

Table 24. Number of natural and other disasters and incidents in Slovenia for 2014.

Event	Number of Events
Natural Disasters	1957
Other Disasters	1201
Traffic Accidents	2270
Fires and Explosions	3598
Pollution, Accidents Involving Dangerous Substances	655
Nuclear and Other Events	5
Findings of UXO, Supply Disruptions and Damage to Facilities	850
Technical and Other Assistance	4013
Total:	14549

*Data on events in 2014 are based on the reports completed by 29 January 2015

Table 25. The most damaging natural disasters in Slovenia.¹⁹⁹⁹

Hazard	Date	Number of killed	Number of affected	Damage (000US\$)
Extreme hot temperature	07/2003	289		80 000
Storm	18/09/2007	6	1 050	292 000
Earthquake (seismic activity)	12/07/2004	1		10 000
Extreme cold temperature	31/01/2014	1	50 000	
Flood	05/11/2012		12 000	265 000
Earthquake (seismic activity)	12/04/1998		700	
Earthquake (seismic activity)	12/07/2014		605	
Storm	17/01/2007			100 000
Flood	19/08/2005			5 000

Source: "EM-DAT: The OFDA/CRED International Disaster Database" www.em-dat.net - Université Catholique de Louvain - Brussels – Belgium

Earthquakes

From a geotectonic point of view, each year Slovenia is shaken by about ten weak to moderate seismic shocks, which focus is at a depth between five and ten kilometres. This is because the country lies on the seismically active southern boundary of the Eurasian tectonic plate on the North-Western boundary of the Mediterranean-Himalayan seismic belt, which is one of the most seismically active zones on Earth.

According to a 2014 EU sponsored study, "The territory of Slovenia is characterised by high geological and tectonic complexity. A principal geologic feature of the Slovenia is very diverse lithology, which is mainly composed of sediments or sedimentary rocks. Consequently, approximately one-third of Slo-

¹⁹⁹⁸ Preventionweb, <http://www.preventionweb.net/english/countries/statistics/?cid=157>.

¹⁹⁹⁹ Data are relevant from 1991 (the independence of Slovenia) to January 2014.

venia (and approximately 20 % of inhabitants) is at least highly exposed to slope mass movements due to morphology, geological and tectonic conditions. In general terms, slope mass movements occur in almost all parts of the country.”²⁰⁰⁰

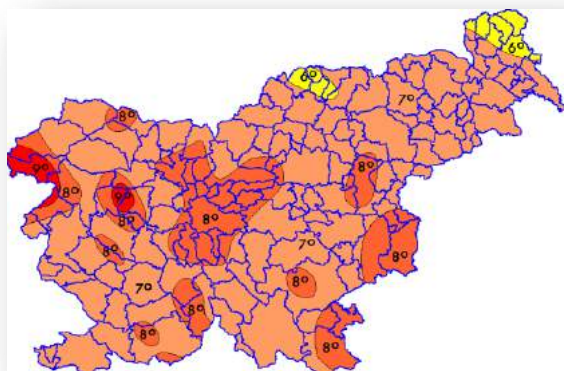


Figure 32. Population delivery vis-a-vis probabilistic assessments of seismic activities of 7, 8, and 9 level on MCS scale.²⁰⁰¹

The Slovenian territory is the juncture of three geotectonic units: the Alps in the north and west, the Dinarides in the Southern, South-Western and central part, and the Pannonian Basin in the north-east.²⁰⁰² There have been many destructive earthquakes in this region: in 1895, a strong earthquake with a magnitude between 8 and 9 on the MCS scale severely damaged Ljubljana, affecting the largest density of population and numerous important government functions.²⁰⁰³ Historically, the most destructive of them are the following:

Table 26. Most powerful earthquakes on the territory of Slovenia.²⁰⁰⁴

Date	Time	Location	MCS	Magnitude	Effect
26 March 1511	2 pm	Idrija-Cerkno	X	6,90	Destructive
8 August 1511	-	Čedad	IX	5,70	
17 June 1928	6 pm	Krško-Brestanica	VIII	5,06	
Year 1640	-	Brežice	IX	4,91	Shallow
10 May 1689	3 am	dolina Temenice	VIII	5,00	
11 February 1699	-	Metlika	VIII	5,02	Extensive damage
7 March 1857	2.56 am	Cerkno-Straža	VII-VIII	5,50	

²⁰⁰⁰ Peternel, Tina, Mateja Jemec Auflič, Mitja Janža, Matjaž Mikoš and Jože Papež, *Benchmark report on common procedures in hazard/risk assessment and mapping for Slovenia*. A 2014 deliverable from WP4 Project “State-of-the-Art in Risk Management Technology: Implementation and Trial for Usability in Engineering Practice and Policy,” www.researchgate.net/publication/272153281_Benchmark_report_on_common_procedures_in_hazardrisk_assessment_and_mapping_for_Slovenia.

²⁰⁰¹ ACPDR, “Damage assessment and usability of earthquake damaged building,” http://www.protezionecivile.gov.it/cms/attach/editor/Slovenia_damage_assessment.pdf.

²⁰⁰² Slovenian Environment Agency.

²⁰⁰³ Milan Orožen Adamič, “Earthquake Threat in Ljubljana,” *Geografski zbornik* 35 (1995): 46–112.

²⁰⁰⁴ Administration of the Republic of Slovenia for Geophysics, www.sos112.si/eng/page.php?src=og11.htm.

14 April 1895	8.17 pm	Ljubljana	VIII-IX	6,06	Destructive
9 January 1917	8.23 am	Brežice-Krška vas	VIII	5,59	Destructive

According to the World Health Organisation, the seismic map of Slovenia includes two specific areas of seismic activities. While the most active as a number of cases area is between the towns Ptuj and Novo Mesto the most dangerous epicentre of seismic activities is 50-70 km west from the capital city of Ljubljana, the so-called Gorenjska-Ljubljana area (with a seismic hazard higher than 4).



Figure 33: Seismic Hazard Distribution Map.²⁰⁰⁵

The Seismological Institute of the Republic of Slovenia provides the following scheme of the country's seismic zones (in Slovenian language spelling):

- Čičarija area (A);
- Goriško-Javornik area (B);
- Gorenjska- Ljubljana area (C1);
- Dolenjska-Notranjska-Bela Krajina area (C2);
- Karawanke-Kozjansko area (D);
- Koroška-Haloze area (E);
- Štajerska-Goričko area (F).

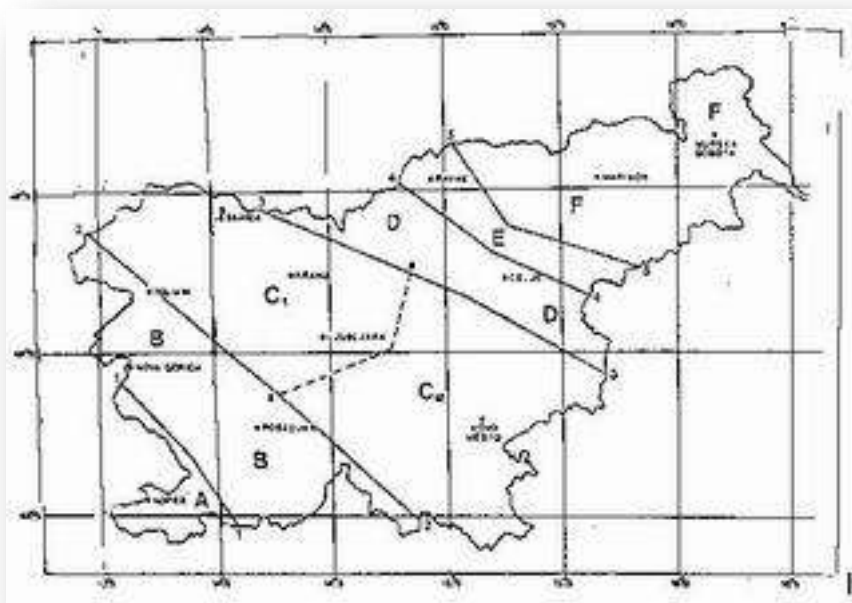


Figure 34: Seismic zones in Slovenia (Seismological Institute of the Republic of Slovenia, 1991).²⁰⁰⁶

The most active zones are C1 and C2 with assessed maximum magnitude as of 6.2 and intensity of 8-9 levels on the MSC scale. The towns at the highest risk include Idrija, Ljubljana, Krško, Tolmin, Ilirska Bistrica and Litija with a population about 700 000 citizens (more than 33% of the country's population).²⁰⁰⁷ The recent application of probabilistic seismic hazards methodology for distributed seismicity confirms the historical statistics.

Floods

In recent Slovenia, floods are considered as the natural phenomena with increasing damaging capacity and impact on people and economy. Floods pose a threat to over 300 000 hectares of land (about 15% of the territory of the country), which lies mostly in narrow valleys carved by torrents. The floods are a source of risk for about 600 000 people or over 30% of the population while under high risk of flooding are 24% of them.

The Slovenian authorities pay special attention to the floods: the research and monitoring of the flood risk is one of the civil protection focuses, along with the alert system, preventive measures and training of the population. Risk assessments are conducted according to the character of floods and source of the high water: heavy rains and the melting of snow. The civil protection organisation²⁰⁰⁸ uses the following set of qualifications for analyses of the character of floods:

- Type of stream (mountain, valley-bottom, flatland);
- Terrain (sloping, depressed);
- Volume;
- Intensity and extent of precipitation;
- Season (autumn, spring);

²⁰⁰⁶ Source: <http://www.sos112.si/eng/page.php?src=og11.htm>.

²⁰⁰⁷ 2005 Hyogo report.

²⁰⁰⁸ ACPDR web site,
<http://www.sos112.si/eng/page.php?src=og11.htm>.

- Type of high-water wave;
- Duration;
- Frequency in particular timeframe (5 for frequent to 50 years for catastrophic floods);
- Type of land and of inundated facilities.

In terms of defining the floods hazard, the local authorities have qualified the country's rivers in four categories, depending the main source of high waters – snow or rain:

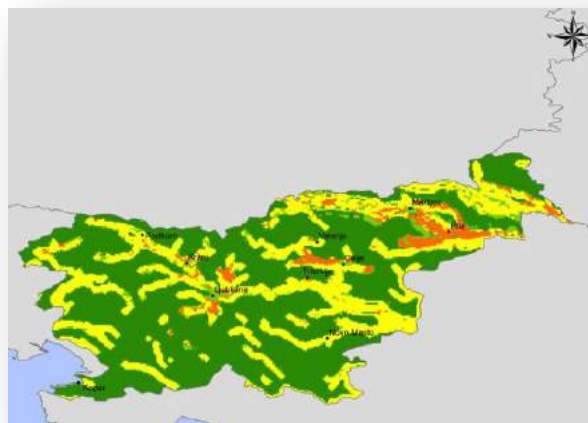
- A – Snow driven regime (Mura and Drava rivers);
- B – Snow-rain driven regime (Sava and Savinja rivers);
- C – Rain-snow driven regime (Soca river);
- D – Rain driven regime (Dragonja, Rižana, Reka and Pivka rivers).

The risk from floods comes mostly from the River Sava (Upper, Middle and Lower Sava), as well from Drava and Savinja rivers (Figure 6).

The distribution and timing of rainfall are largely influenced by the geographical location of Slovenia and the diversity of its terrain. According to ACPDR, “[m]ost rainfall occurs during advances of wet and relatively warm air from the Mediterranean.”²⁰⁰⁹ The map of flood hazard level, produced by the World Health Organisation, illustrates that the level of flood risk is the highest (Figure 7, coloured in orange) for the North-eastern part of the country, followed by the area of Celje in central Slovenia, and the Valley of Sava River, including the capital city of Ljubljana.



Figure 35. The biggest rivers in Slovenia that cause most dangerous floods.



²⁰⁰⁹

ACPDR web site, <http://www.sos112.si/eng/page.php?src=og12.htm>.

Figure 36. Flood hazard in Slovenia.²⁰¹⁰

Landslides

Slovenian area is relatively highly exposed to slope mass movement processes due to its geological and morphological settings. Heavy rains and floods are the most often source of landslides – in Slovenia there are about 1 400 landslides at encompassing a territory of approximately 7 000 km² (everywhere, except in the Primorska and Dolenjska Karst region).²⁰¹¹

According to the latest study of landslides, "... the 15-years average landslide damage represents 7.6 % of total damages due to disasters in Slovenia (and 0.03 % of the GDP)."²⁰¹² In the last 15 years, more than 10 people have been killed in landslide events."²⁰¹³ Landslide susceptibility map of Slovenia at scale 1:250,000 have been completed, based on the extensive landslide database and analyses of

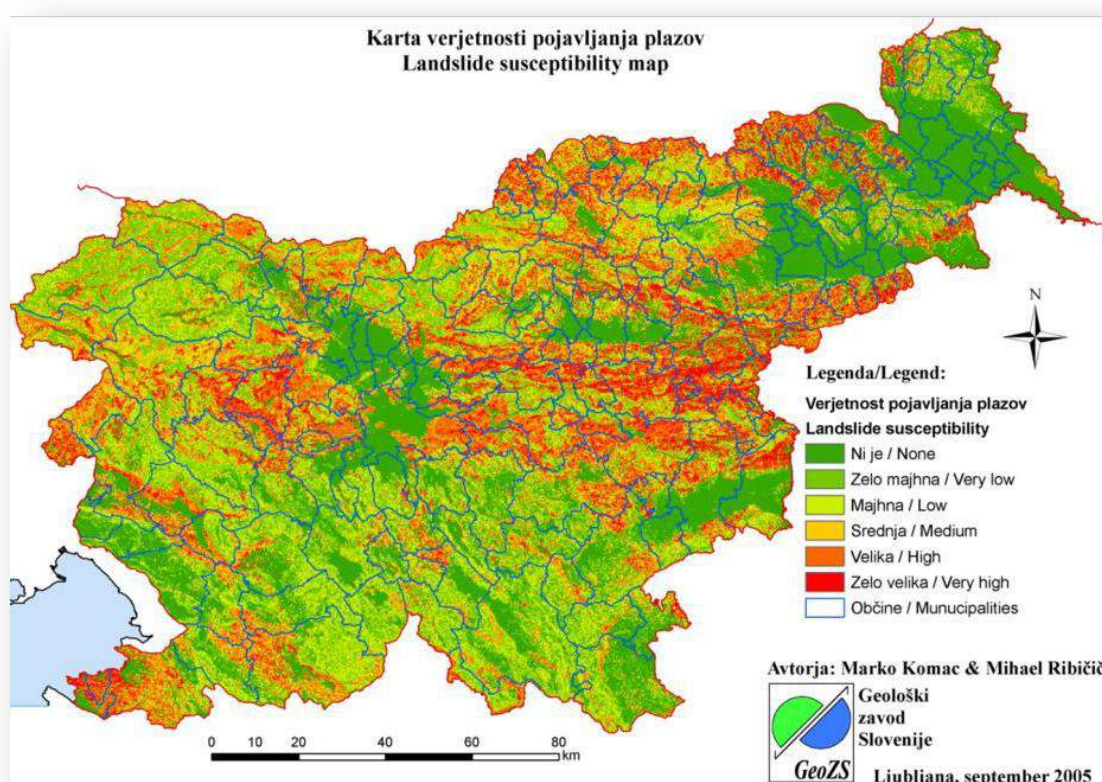


Figure 37. Landslide susceptibility map of Slovenia.²⁰¹⁴

landslide spatial occurrence.²⁰¹⁵ The map below illustrates that the landslides have been

²⁰¹⁰ World Health Organization (Europe), <http://data.euro.who.int/e-atlas/europe/images/map/slovenia/svn-flood.pdf>.

²⁰¹¹ Jasna Šinigoj, Podboj Martin, Komac Marko, Požar Mitja, Krivic Matija, and Jemec-Auflic Mateja, "Susceptibility Map of Triggering Landslides Due to Rainfall Forecast as a Part of Innovative Inspire Compliant Cloud Based Infrastructure – InGeoCloudS," *Geophysical Research Abstracts* (2014), EGU2014-15980.

²⁰¹² Peternel, Tina et al. (2014), p. 5.

²⁰¹³ Ibid.

²⁰¹⁴ Komac and Ribicic, "Landslide susceptibility map of Slovenia."

²⁰¹⁵ Marko Komac and Mihael Ribicic, "Landslide susceptibility map of Slovenia at scale 1 : 250,000," *Geologija* 49, no. 2 (2006): 295–309.

concentrated along the main river valleys, related most of all to river regimes and the rain-snow factor.

Avalanches

Given the dominant mountain character of the country, avalanches are of permanent concern for the local people, tourists and business. With the overall expansion of ski tourism the government's concerns of avalanches are increasing – recently, more than 1260 possible avalanches have been registered.²⁰¹⁶

Forest fires

Forests are of special importance for the Slovenian people. The state provides comprehensive care for the health of the forests from a biological and reforestation point of view. According to the Government web site,²⁰¹⁷ “forest fires are a serious problem, especially common in the [region of] Karst.”

A specific character of the risk assessment of forest fires is the fact that during the last years, de-nationalisation of the land, the forests also became mostly private. According to the Slovenia Forest Service, 71 % of the total forested area in Slovenia is now privately owned (about 300 000 private owners), 26 % is in state ownership and 3% are owned by legal entities (local communities or other organisations). However, from a risk point of view, the area covered by private forests is highly frag

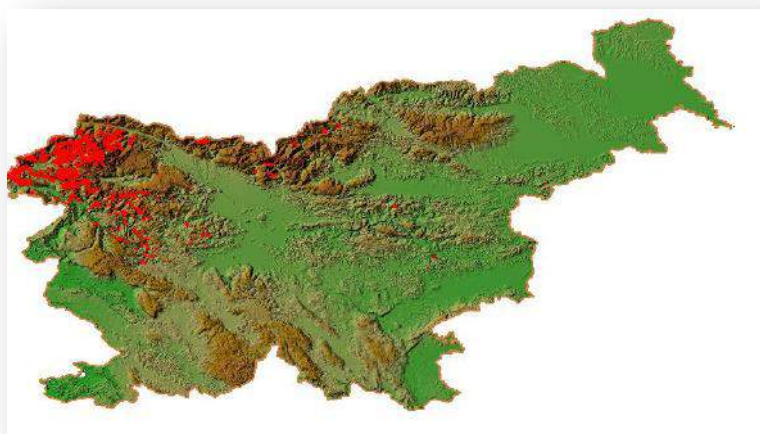


Figure 38: Avalanche threat in the Republic of Slovenia.²⁰¹⁸

mented – the size of the average forest holding is less than 3 ha. The larger forest holdings are in the hilly areas Koroška, Zgornja Savinjska, and Pohorje.²⁰¹⁹

Dangerous weather (cold, sleet)

The first major case of countrywide sleet has occurred on 31 January 2014: because of the heavy burden, trees and electrical infrastructure have started to collapse and fall down. On 2 and 3 February, there was widespread damage on electrical infrastructure and forests. From all 13, eleven provinces were affected: a lot of households were left without electricity; over 2000 km of electrical grid

²⁰¹⁶ Danica Babic (MoD/ACPDR), “Emergency response in Slovenia,” www.unece.org/fileadmin/DAM/env/teia/ConsulationPoCII/Slovenia.pdf.

²⁰¹⁷ Information from the web site of the Slovenian Government, www.vlada.si/en/about_slovenia/geography/forests_in_slovenia/the_threat_to_slovenian_forests/.

²⁰¹⁸ Babic, “Emergency response in Slovenia.”

²⁰¹⁹ Slovenia Forest Service brochure, http://www.zgs.si/fileadmin/zgs/main/img/PDF/PDF_BROSURE/Brosura_ANGL.pdf.

were affected; 40 % of forests in Slovenia were heavily damaged and it will take decades to mitigate this damage. Combined estimated damage is over 430 million €, with one casualty and 23 injured at the end of the intervention among rescuers, electrical company workers and army personnel.²⁰²⁰

The Ministry of Defence Annual Report for 2014 provides a detailed picture of the number of natural disasters and incidents and the relevant number of operations that took place in 2014 (Table 4).

B) Technological hazards

The main technological hazards affecting Slovenia are those associated with nuclear and other radiological threats and chemical and industrial accidents.

Nuclear and other radiological threats

Slovenian authorities consider the following sources of nuclear and radiological threats:²⁰²¹

- Nuclear facilities (nuclear power plant, nuclear research reactor, uranium enrichment facilities, facilities for the production of fissile substances, facilities for the treatment and depositing of irradiated nuclear fuel, and facilities used for the storage, processing and depositing of nuclear waste material);

Table 27. Natural disasters and response operations in 2014.²⁰²²

Date	Number of Emergency Response Operations	Number of Participants	Number of Injured People
High Sea Tide	14	17	0
Floods	2321	17216	3
Avalanches	241	1673	0
Deep Snow	1284	6865	1
Hail	6	76	0
Strong Wind	451	2883	0
Lightning Strike	26	217	1
Sleet	2613	24433	13
Disruptions of Traffic due to Natural Disasters	16	95	0
Total	6972	53475	18

- Facilities where sources of radioactivity are used (stationary or mobile facilities where radioisotopes are used, e.g. in industry, research institutions and hospitals)
- Transport of radioactive substances (by road, rail, air or sea).

²⁰²⁰ Branko Dervodel, Presentation delivered in Montenegro, 22-24 April 2014, <http://dpri.info/sites/default/files/Slovenian%20Experience%20-%20Sleet%20disaster%20%28February%202014%29.pdf>.

²⁰²¹ Annual Report 2014 on Radiation and Nuclear Safety in the Republic of Slovenia, Republic of Slovenia, Nuclear Safety Administration, http://www.ursjv.gov.si/fileadmin/ujv.gov.si/pageuploads/si/Porocila/LetnaPorocila/2014/Annual_report.pdf.

²⁰²² Ministry of Defence Annual Report for 2014, http://www.mo.gov.si/fileadmin/mo.gov.si/pageuploads/pdf/ministrstvo/annual_report_2014.pdf.



Figure 39: Slovenian nuclear facilities.²⁰²³

From civil protection point of view, there are four main nuclear and radiological facilities in Slovenia that may pose serious risks:

- There is one nuclear power plant in Slovenia (Krško NPP). It is situated on the left bank of the Sava River, around 3 km from the town of Krško. The power plant is 70 km South-East of Ljubljana and 35 km North-West of Zagreb. In 2013, the Krško NPP has produced about 5,3 MWh gross electrical energy from the output of the generator.
According to the 2013 Annual Report on Radiation and Nuclear Safety in the Republic of Slovenia,²⁰²⁴ there have been three operations shutdowns at Krško NPP. For its part, the latest Annual Report on Radiation and Nuclear Safety notes that 2014 has been “...one of the quietest years in recent years. At the Krško Nuclear Power Plant, there were no obstructions worth mentioning. It operated the whole year without interruption.” The Report underlines that “[F]or the first time the Krško NPP exceeded the magical limit of 6 TWh of electrical energy produced due to a year of no outages and enough water from the Sava river.” The Report states also that, “In the autumn the owners of the Krško NPP approved an investment in the safety upgrades programme in accordance with requirements on the basis of the lessons learned from the Fukushima accident.”²⁰²⁵
- The second nuclear reactor TRIGA²⁰²⁶ (RR TRIGA at Fig. 7) is for research purposes and is located near the town Brinje. The operator of the TRIGA Mark II Research Reactor is the Jožef Stefan Institute (JSI) and operation is carried out by the personnel of the Reactor Infrastructure Center (RIC). According to the above quoted Annual Report, in 2013, there were ten automatic reactor shutdowns, three of which were caused by operator error, six by disturbances of the linear channel switch, and one by primary water activity detector disturbances.

²⁰²³ Agency for Radwaste Management (ARAO), <http://www.arao.si/resolutions>.

²⁰²⁴ Annual Report 2013 on Radiation and Nuclear Safety in the Republic of Slovenia, Slovenian Nuclear Safety Administration, http://www.ursjv.gov.si/fileadmin/ujv.gov.si/pageuploads/si/Porocila/LetnaPorocila/2013/Ang_LP_2013.pdf.

²⁰²⁵ Annual Report 2014 on Radiation and Nuclear Safety in the Republic of Slovenia, p. 3.

²⁰²⁶ TRIGA reactor is the most widely used non-power nuclear reactor in the world. General Atomics (a division of General Dynamics) has sold 66 TRIGA reactors, which are in use or under construction at universities, government and industrial laboratories, and medical centres in 24 countries.

- The Central Interim Storage Facility (CISF BRINJE at Fig. 7) in Brinje is managed by the Agency for Radwaste Management (ARAO). It is for storing Low- and Intermediate- Level Waste (LILM) from small producers (about 130 industrial organisations and 7 hospitals). There are also still some temporary storage facilities operating under a special licence. The storage facility on the site of the Krško NPP accepts all LILW from the NPP. Its capacity will be probably filled out by 2020.
- In the area around Žirovski Vrh, the extraction of uranium ore had taken place between 1982 and 1990. Mill tailings have been disposed of on the Jazbec mine waste pile and hydrometallurgical tailings – at the Boršt site. In 1990, after the extraction of uranium ore has been temporarily halted and a subsequent decision on permanent cessation has been taken, the process of remediating the mining and its consequences has begun.

In general, the overall effective dose of radiation of an adult in Slovenia is estimated by the Annual Report 2014 as “extremely low.”

Table 28. Radiation exposure of the adult population in Slovenia due to global contamination of the environment with artificial radionuclides in 2014

Transfer pathway	Effective dose (mSv per year)
Inhalation	0.001
Ingestion: drinking water	0.037
Ingestion: food	1.1
External radiation	6.4
Total (rounded)	7.5

Chemical and industrial accidents with ecological consequences

The chemical sector of Slovenia represents manufacturing of chemicals, chemical products and man-made fibres (about 2/3 of the Slovenian chemical industry’s total income), as well as of rubber and plastic products (about 34 % of the total branch income). Manufacturing of pharmaceutical preparations and raw materials is indisputably the most important subgroup of the Slovenian chemical industry. As the range of the chemical industry’s products is rather extensive, only the basic subgroups of products are listed below:

- Chemicals, chemical products and man-made fibres includes technical gases, dyes and pigments, inorganic chemicals, organic chemicals, basic polymer materials, pesticides and other agrochemical products, coatings, lacquers, printing inks, putties, sealants, pharmaceutical raw materials, pharmaceutical preparations, soaps, detergents, cleansers, polishes, cosmetic products, explosives, adhesives, essential oils, other chemical products, man-made fibres;
- Rubber and plastic products, includes tires and air-tubes for vehicles, reconditioned tires, other rubber products, plastic plates, tapes, foils, tubes, pipes, hoses, profiles, plastics packaging, plastic products for construction, other plastic products.

Figure 11 illustrates the scope of sources of technology hazards throughout the territory of Slovenia. Obviously, areas under the most serious threats are the valleys of rivers Sava and Drina:

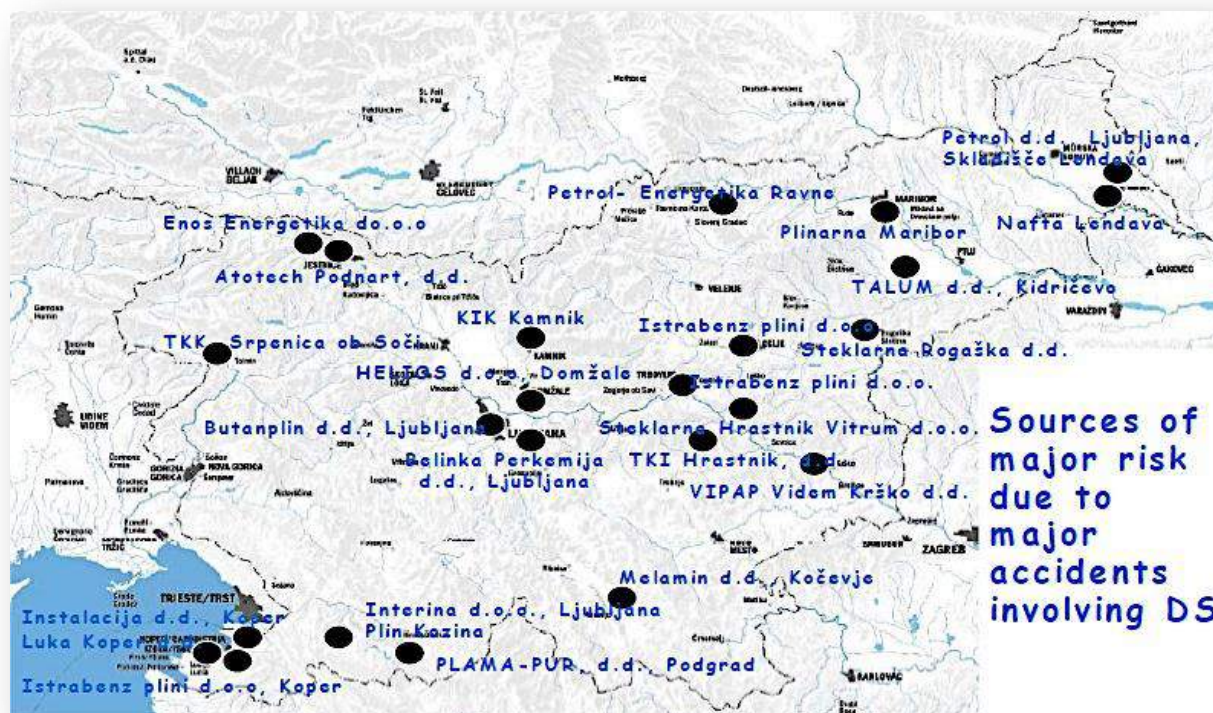


Figure 40: Main sources of risks due to major accidents involving dangerous substances (DS).²⁰²⁷

1.2 Policy and Governance

1.2.1 Strategy scope and focus

To continue the overall national security related legislative and organisational reforms, undertaken in Slovenia, the Government approved a package of principle documents: Act on Protection Against Natural and Other Disasters (1994), Resolution on the National Security Strategy of the Republic of Slovenia in 2001, Doctrine on Protection, Rescue and Relief in May 2002. This set framed the country's new approach towards comprehensive security in the 21st Century, civil protection included. The framework is innovative and with an ambition of being efficient and relevant.

In the Resolution on the National Security Strategy of the Republic of Slovenia of 2001, the political statement was that the national security policy consists of the three "basic" policies plus the economic policy and policy of protecting and preserving the national environment and space."²⁰²⁸ Obviously, this overwhelming definition puts civil protection from a natural and man-made disaster into a comprehensive context of the "national environment and space."

In 2010, the new National Security Strategy of the Republic of Slovenia introduced important changes. Accordingly, the overall approach to civil protection is seen as a part of the national security policy "... consists of the foreign policy, the defence policy, the policy of ensuring internal security and the policy of protection against natural and other disasters." (Art. 5.1) Even more, the chapter "Policy of Protection against Natural and Other Disasters" utters that "[t]he policy of protection against natural and other disasters will remain to be focused on the comprehensive management of

²⁰²⁷ Danica Babic, "Emergency response in Slovenia."

²⁰²⁸ Mesko et al., 2010.

natural and other disasters.” The policy is about wider and important social relationships that are governed through a variety of political, legal, organisational and other instruments while management is the implementation of policy by the state administration.

It is not clear, why the Slovenian authorities have decided to leave the comprehensive context and political approach and to focus on operational disaster management. The new approach builds an impression that the disaster management sector is too isolated and has more practical character than a political one. This issue is important, because definitions pave the way from political/institutional declarations towards instrumental legal regulations and the building of implementation architecture (in terms of organisation, procedures, and resources).

From one side, the country applies a comprehensive approach (NSS, 2010, art. 5.1) to security at all levels (international, national, societal and individual) and aspects (economic, social, environmental, medical, demographic, educational, scientific and technological...). If one adds to this list also the ‘standard’ aspects of foreign policy, defence and internal security, will see that the scope of security of Slovenia is extremely wide for a country in a relatively stable and secure international and internal environment. However, the National Security Strategy puts “...the protection of life and a high level of all forms of security for its people...” in a very broad context that definitely includes civil protection from natural and other disasters. Even more, the document entails an important political message that “[i]n the future, the fundamental purpose of the national security policy of the Republic of Slovenia will be to ensure the highest possible level of human security ...,” as stipulated by art. 5.1 – so the paradigm shift from national towards human security is an impressive ambition and the civil protection policy is in its context.

From another side, it is obvious the strong emphasis on “management” instead of on “policy.” The chapter “Policy of Protection against Natural and Other Disasters” begins with the statement that in the Art. 5.1 that “[t]he policy of protection against natural and other disasters will remain to be focused on the comprehensive management of natural and other disasters.” It is not clear, whether such a replacement of policy with management is a result of a poor expression or there is a strong desire to make things more practical than political.

However, in summary, the key points of the recent Slovenian strategy towards civil protection include:

- Disasters – natural and man-made, are between the risk factors for the national security;
- All kinds of disasters are managed under integrated and co-ordinated policy;
- Disaster management policy is a civil one;
- The core political approach is to guarantee the balance and co-ordination between national and local authorities;
- The core strategic organisational approach is towards strengthening the capacity of local administration and communities and equalisation of the capabilities between different communities;
- The scope of disaster management includes preparedness, response and relief;
- The focus of the disaster interventions is rescue and relief;
- The human resources for disaster management is a rational combination between professional units and large number of volunteers;
- Raising citizen awareness and ability for providing personal, family and community protection;
- Budgets for disaster management are provided at national, ministerial and local level;

- Socialisation of risks and consequences is reduced through strengthening of the insurance policy and culture;
- Enhanced regional and bi-lateral co-operation in disaster management, contribution to the EU overall civil security mechanism and active engagement in the relevant international organisations and programmes.

1.2.2 Monitoring and analytical support to policy making; R&D

According to the Doctrine on Protection, Rescue and Relief (2002),²⁰²⁹ “[d]isaster preparedness consists of monitoring and researching dangers and methods for protecting against them.” Among the key instruments for providing protection, rescue and relief are the “monitoring, notification and warning system.” Art. 4 defines it as a “unified subsystem” that “consists of informational and telecommunication systems, notification centres and warning equipment.” In later documents, monitoring and warning are determined as components of the Slovenian “comprehensive management of natural and other disasters.”²⁰³⁰ Currently, the unified monitoring, notification and warning system in Slovenia comprises:

- Monitoring networks;
- Notification centres;
- Computer support and telecommunications service;
- Warning system.

Slovenia’s report of 2005 for the Hyogo Framework for Action explains the basic objectives of the system in the following way:

- monitoring of meteorological, hydrological, seismological, radiological, ecological, health and other conditions;
- a collection of data on hazards, disasters and other phenomena and developments important to the protection system against disasters;
- organisation and maintenance of a database of protection, rescue and relief units and their intervention and resources;
- provision of information to competent national, local community and other bodies and services responsible for the management and implementation of protection, rescue and relief operations;
- warning of the population of any imminent danger, and public alarm announcements;
- activation and co-ordination of rescue service operations;
- logistical and other forms of support in the provision of rescue services.²⁰³¹

The monitoring, notification and warning sub-system has the following architecture:



²⁰²⁹ On the Doctrine on Protection, Rescue and Relief, see Chapter 2.1.

²⁰³⁰ National Security Strategy (2010), Art. 5.1.

²⁰³¹ Hyogo, 2005, Art. 2.5, p. 15.

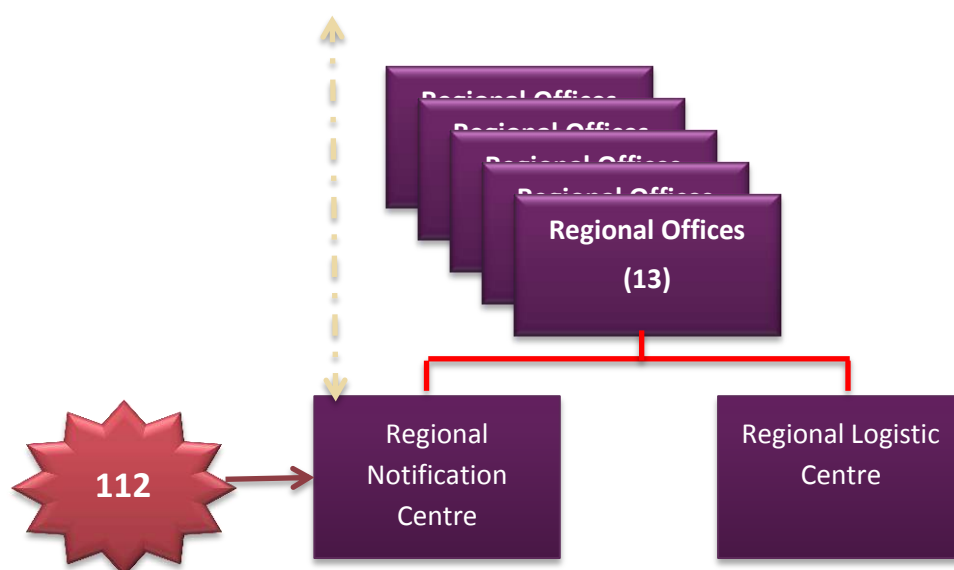


Figure 41: Monitoring, notification and warning sub-system.²⁰³²

Monitoring of natural and other hazards is organised through institutionally based observation posts or networks, contributions from incidental informers and through the horizontal exchange of information. Data are collected, processed, stored, and forwarded by the national and regional notification centres. In particular, data on meteorological, hydrological, seismological, nuclear, and environmental situations, threats to health, traffic events, obstruction of infrastructure systems, other dangers and threats, the conducting of protection, rescue and relief efforts, and damage are collected in permanent databases.²⁰³³

According to the National progress report on the implementation of the Hyogo Framework for Action (2013-2015), “The unified monitoring, notification and warning system in Slovenia comprises:

- the monitoring network,
- notification centres (13 x 112 Centres),
- the computer support and telecommunications service, and
- alarming and warning system.”²⁰³⁴

The report enlightens the multi-agency approach to monitoring the hazards and the established a shared information system that connects the monitors with notification centres. A further development of the video control system for wildfire and oil spills at the sea shall provide capacity to monitor of about 40,000 additional hectares.

The network of notification centres (see Figure 13) is seen as the core of the system: the National Notification Centre and 13 regional offices establish the hub that connects the sources of information with the decision-making bodies. Each regional office of the ACPDR includes a regional notification

²⁰³²

Republic of Slovenia National Report and Information on Disaster Reduction for the World Conference on Disaster Reduction (Kobe-Hyogo, Japan, 18-22 January 2005), p. 5. Available at www.unisdr.org/2005/mdgs-drr/national-reports/Slovenia-report.pdf. Further down referred to as “2005 Hyogo report.”

²⁰³³

Doctrine on Protection, Rescue and Relief, Art. 9.

²⁰³⁴

National progress report on the implementation of the Hyogo Framework for Action (2013-2015), p.16, available at http://www.preventionweb.net/files/41665_SVN_NationalHFAprogress_2013-15.pdf.

centre and a regional logistic centre (warehouse). The National Notification Centre integrates different monitoring sources, manages the overall communication and information system, does the analytical and statistical work on collected data and has less operational duties. The regional centres, in addition to collecting data and responding to emergency 112 calls, are in charge of dispatches for fire-fighting, emergency medical aid, the mountain rescue service, the cave rescue service, the underwater rescue service, civil protection and other rescue services.”²⁰³⁵ The regional centres are based in Ljubljana, Kranj, Trbovlje, Celje, Slovenj Gradec, Maribor, Murska Sobota, Ptuj, Krško, Novo mesto, Postojna, Koper and in Nova Gorica.

According to the Slovenia’s 2005 Hyogo report, the number 112 has been used in Slovenia since the beginning of 1997. Ordinary citizens can call this number in an emergency or if they need a fire brigade, emergency first aid, or aid from any other rescue services. “By dialling 112, people also can obtain critical information on weather, water, snow and other conditions, on disturbances and interruptions in the supply of potable water, electricity and gas and in other areas of life importance.”²⁰³⁶

All 13 regional notification centres are integrated into a computer network. Information support is provided through tailor-made computer applications in the regional notification centres, such as the Geographic Information System (GIS-Ujme), the sound alarm management and triggering system (DUNJA), the system for the acceptance of telephone calls (ROK), the radio traffic control system (KC08), the radio network control system (Nadzor ZARE) and the pager system (ZAPP).²⁰³⁷

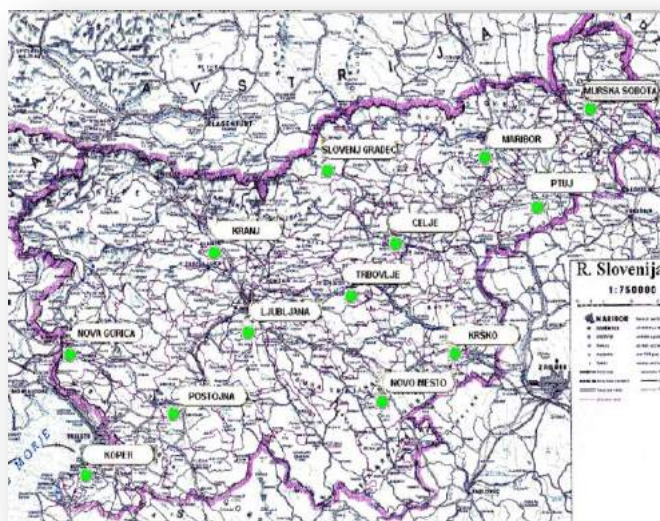


Figure 42. Regional notification centres²⁰³⁸

In recent years, much attention has been devoted to the communication and information system upgrade of notification centres. The new services regarding the 112 emergency calls (application

²⁰³⁵ 2005 Hyogo report, Art. 2.5, p. 16.

²⁰³⁶ 2005 Hyogo report, p. 16.

²⁰³⁷ The Administration for Civil Protection and Disaster Relief of the Republic of Slovenia plans a gradual transition to a new beam radio communication system after 2010.

²⁰³⁸ Babic, “Emergency response in Slovenia.”

SMS112 for receiving text emergency calls and application video112 for receiving video emergency calls) have been introduced, and the public alert system has been reorganised.²⁰³⁹

In Slovenia, the civil protection is viewed as an interdisciplinary field in terms of research and scientific work, analysis, experimentation, and development. Academia, specialised institutes, private companies and individual researchers provide scientific support to disaster management. “The majority of work is accomplished in the following areas: civil engineering, chemistry and chemical technology, water resources management, forestry, geology, health, public relations, fire engineering, computer science, information systems, psychology and insurance companies.”²⁰⁴⁰

Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015) informs that “...the following research and development projects have been successfully concluded in 2013:

1. Seismic hazard in Slovenia for the needs of civil protection – POTROG;
2. Early warning system in case of danger of triggering landslides – MASPREM;
3. Fire Control in nature - video surveillance system - VIDEOKRAS 4.”²⁰⁴¹

1.2.3 Policy for Prevention

According to the Act on the Protection Against Natural and Other Disasters (1994, amended in 2006)²⁰⁴², the principle of prevention is determined in the following way:

Article 12 (Principle of prevention)

In providing protection against natural and other disasters, the state and the local community shall, within their competence, give priority to the organization of preventive measures.

The act stipulates that each ministry is in charge for prevention in its area of work while the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief uses their monitoring for risk reduction. In terms of prevention, the administration is charged with the tasks related to spatial planning.

1.2.4 Policy for Preparedness

According to the concept of civil protection, recently applied in Slovenia through the Act on the Protection against Natural and other Disasters, preparedness is the key function, performed at national, local and individual level that provides effective protection of people and infrastructure from natural and other disasters. The Doctrine on Protection, Rescue and Relief emphasises, “Priority is given to preventive measures in all forms of planning protection against natural and other disasters.”²⁰⁴³ The policy of preparedness is built on a precise risk assessment and forecasting (including using modelling and simulations) of a variety of natural and man-made hazards. An expanding monitoring, notification and warning system helps to integrate data and risk assessments through horizontal and vertical chains of communication and reporting. National and local contingency plans for emergency protec-

²⁰³⁹ Detailed information on Slovenian communication and information system for civil protection is provided in Chapter 4.4.

²⁰⁴⁰ 2005 Hyogo report, Art. 3.2.

²⁰⁴¹ Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015), available at http://www.preventionweb.net/files/41665_SVN_NationalHFAprogress_2013-15.pdf, p 22-23.

²⁰⁴² The Act is available at <http://www.sos112.si/db/priloga/p4360.pdf>.

²⁰⁴³ Doctrine on Protection, Rescue and Relief, Art. 3.

tion, rescue, and relief are drafted based on this comprehensive picture. The power of these plans is the combination of specialised protection and rescue units and a wide number of volunteers – both well trained and equipped. In parallel to the organisational and technical solutions, a system for education, training, and public awareness on hazards has been established. Relevant as size and components state and local reserves for protection, rescue and relief purposes have been provided and maintained.²⁰⁴⁴

1.2.5 Policy for Response

According to the Act on the Protection against Natural and other Disasters and the Doctrine of Protection, Rescue and Relief, the policy for response in cases of emergency is based on three core principles. The focal point of any intervention, rescue and relief and other protection activities during natural and other disasters is to protect the life of the people: every person has the right to protection and his/her protection shall be a priority over any other protection in case of emergency. Secondly, response to an emergency shall be started by the affected local authorities and expand gradually, engaging neighbours, regions, and the state; the Armed Forces and their resources are the last resort. Thirdly, the central authorities provide co-ordinated response to the major disasters, assisting to local communities in emergency response, providing support to the Civil Protection Commander and guaranteeing that the basic conditions for life are provided.

For the success of the response policy, citizens also have a crucial role. The Act on the Protection Against Natural and Other Disasters obliges them to:

- participate in the Civil Protection;
- provide material means (hereinafter referred to as material obligation);
- be trained and prepared for personal and mutual protection and implementation of required protective measures.²⁰⁴⁵

The overall responsibility for the co-ordination of disaster response preparedness and intervention is Administration of the Republic of Slovenia for Civil Protection and Disaster Relief.

1.2.6 Policy for Relief and Recovery

Conceptually, the Slovenian approach to post-emergency phases puts rescue and relief into a pair, while recovery is the last component of disaster management. This construct reflects the mechanism of decision-making and implementation, as well as the funding of recovery measures, programmes and policies. The Slovenian authorities believe that the focus on recovery is completely relevant and will provide more coherent and consecutive measures not only to return to function through rehabilitation of damages but for reconstruction and improvement. By law, the policy for recovery is one of the core responsibilities of the state. It shall provide “assistance in reconstruction and recovery from natural and other disasters in order to protect the life and health of people, property, cultural heritage and the environment, prevent further damage and provide basic living conditions.”²⁰⁴⁶

The Ministry of the Environment and Spatial Planning is the core state institution for recovery planning and management. Its operational body is the Natural Disaster Recovery Division, whose basic aim is to organise, co-ordinate and perform implementation of emergency works to stabilise and

²⁰⁴⁴ Doctrine, 2002; 2005 Hyogo report; Hyogo Progress report, 2013, 2015.

²⁰⁴⁵ Act on the Protection against Natural and other Disasters, Art. 15.

²⁰⁴⁶ Act on Protection, Rescue and Relief, Art. 36.

prevent the spread of the consequences of natural disasters. The Natural Disaster Recovery Division's functions include also:

- Drafting programme proposals for elimination of disaster effects;
- Observation of potentially endangered areas;
- Experts identification and assessment of risks within the disaster impact area;
- Drafting proposals for relocation, expansion and other adjustments for the existing infrastructure facilities, affected by the disaster events;
- Preparation of national spatial plan for cases of major interventions;
- In case of emergency, implementation of works to stabilise and prevent the spread of damages and other consequences;
- Conducting of administrative procedure which deals with removing the aftermath of natural disasters;
- Monitoring of measures for removing the aftermath of disasters;
- Implementation of decisions for allocation of funds for rebuilding to any beneficiary²⁰⁴⁷;
- Management of reconstruction works, based on the Removal of Consequences of Natural Disasters Act;
- Learning lessons and drafting legal and organisational proposals for further risk reduction;
- Database management as a basis for carrying out preventive measures and removing the aftermath of natural disasters as well as on the use of state aid funds;
- Others.

The municipalities are also responsible for organising and conducting recovery activities in their respective areas.

The policy for recovery is regulated by the Act on the Recovery from the Consequences of Natural Disasters (Official Gazette of the Republic of Slovenia, 75/2003),²⁰⁴⁸ the Procedure for Damage Assessment in Case of Natural and Other Disasters (ACPDR nb.017-00-23/2005-2 of 09/27/2005), and the Decree on the Damage Evaluation Methodology.²⁰⁴⁹

Recovery and reconstruction are also objects for academic and engineering research, experimentation, and development.

1.3 Financing

1.3.1 Investing in preparedness

Despite that, Slovenia (followed by Bulgaria) has the largest emergency reserve fund in the Balkans – about USD 40 million,²⁰⁵⁰ the amounts allocated are grossly inadequate for funding a major disaster event. The administrative process involved in mobilising additional resources in cases of major disasters (e.g. when the size of damages by far exceeds the financial resources available) appears to be administratively cumbersome, lengthy and complex, and as a result rather time-consuming.

²⁰⁴⁷ For details see 1.3.2.

²⁰⁴⁸ Available in Slovenian language at <http://www.uradni-list.si/1/objava.jsp?urlid=200375&stevilka=3620>.

²⁰⁴⁹ Available in Slovenian language at www.uradni-list.si/1/objava.jsp?urlid=200367&stevilka=3224.

²⁰⁵⁰ According to UN-WB study (Gurenko, Zakout, 2008). To compare: Bulgaria provides about US\$32 m.

Planning for emergencies is an integral part of the government budgetary process. According to the Public Finance Act,²⁰⁵¹ a budget reserve of up to 1.5 per cent from the total revenue “... shall be used to finance expenditures covering the elimination of the consequences of emergency situations such as an earthquake, floods, landslide, snowslide, snowdrifts, hurricane, hail, sleet, frost, drought, mass outbreak of contagious human, animal or vegetal diseases other natural or ecological disasters.” (Art. 46) The annual budgetary allocations for emergencies are typically mandated by existing legislation on disasters caused by the impact of natural hazards and on another emergency. In addition, the Government may provide additional budgetary resources through several state agencies, which can be released in the case of a disaster. In cases of emergencies, the Slovenian authorities (Government and Parliament) can also increase the originally planned budgetary appropriations for disasters by passing special emergency legislation. Country disaster funds seem to be non-accruing budgetary funds, meaning that they maintain the same statutory size and that in years when there are no losses they do not receive additional financial allocations.

Disaster management activities are financed through the national and municipal budgets, and through insurance payments and other funds contributed by commercial companies, institutions and other organisations. According to UN study,²⁰⁵² “[e]very year the Government of Slovenia allocates approximately 0.4 per cent of the national budget to the disaster management system. Municipalities are required to earmark 3 per cent of their annual budgets to civil protection, although the average actual figure stands at just 2.1 per cent.”

Fire risk reduction activities are partly financed from a separate fire fund, which is generated from a tax on fire insurance.²⁰⁵³ Currently, 5 per cent of all fire premiums is used for fire risk reduction activities.

The main financing body in terms of environmental protection and disaster prevention is the Investment Monitoring and Finance Division within the Ministry of the Environment and Spatial Planning. This directorate, among other functions, performs tasks related to the environmental protection public services and remediation of natural disasters. It provides cohesion policy for all kind of state investments in programmes and other measures aimed at reducing of natural hazards.

According to the Ecological Agency, there are six large-scale landslides in Slovenia, for which state aid for removal of consequences of landslides, prevention of their expansion and their stabilisation is legally defined. For this purpose, the following actions are defined:

- Prevention of spreading and stabilisation of landslide through construction of water management infrastructure;
- Restoration and replacement of damaged objects of local and state infrastructure, cultural sites, and protected natural sights;
- Renovation or replacement of residential and commercial buildings.²⁰⁵⁴

²⁰⁵¹ Public Finance Act, <http://unpan1.un.org/intradoc/groups/public/documents/UNTC/UNPAN015731.pdf>.

²⁰⁵² UNISDIR, WB, 2008.

²⁰⁵³ Hyogo, 2005.

²⁰⁵⁴ Source: <http://www.arso.gov.si/varstvo%20okolja/poro%C4%8Dila/poro%C4%8Dila%20o%20stanju%20okolja%20v%20Sloveniji/nesrece.pdf>, as it is quoted in *Who does what in Slovenia? Stakeholders involved in natural risk mitigation and risk management*. Published by the Alpine Network of Natural Hazards and Risks Prevention at www.RisKnat.org.

For state aid are entitled persons of public and private law (help for building replacement of facilities that need to be removed from the influence area due to landslide risk), local communities and competent ministries (for the reconstruction of infrastructure facilities). Funding amounts are determined by a programme for removal of landslide consequences for each financial year and for each landslide separately.²⁰⁵⁵

Different institutions fund hazard mapping on a different scale, as an important component of disaster management preparedness:

- Slovenian Research Agency (ARRS) within the Ministry of the Environment and Spatial Planning;
- “Geological Survey of Slovenia” (GeoZS);
- Faculty of Civil Engineering and Geodesy (FGG);
- “Anton Melik” Geographical Institute (GIAM);
- “Geolnženiring” (engineering geological mapping and rock classification, field and laboratory research for underground structures, landslides and mineral resources for construction).²⁰⁵⁶

1.3.2 Investing in consequence management

The Republic of Slovenia has had detailed assessment procedures in place on the national, regional²⁰⁵⁷ and municipal level since 2004. The Decree on the Damage Evaluation Methodology specifies the number of formulas for calculation of material and other wastes. Moreover, it rates prices list are published annually on the ACPDR website.

According to the Act on the Removal of Consequences of Natural Disasters, beneficiaries of recovery funds and measures could be: national authorities; municipalities; persons of public law; persons of private law for the renovation of facilities in which activities are carried out; apartment owners; owners of the buildings, which have been declared cultural monuments or an object that is intended to safeguard the natural heritage.

Funds for removal of the consequences of the natural disaster are allocated to the municipality as a special transfer from the government for reconstruction of the following objects:

- Public infrastructure and facilities of local importance;
- Objects that are owned by municipality and are used for carrying out its activities and for local public service;
- Residential buildings, which are owned by municipality;
- Objects that are owned and used by persons of public law, of which the founder or co-founder is the municipality and for which investment, investment-maintenance or maintenance work are provided within municipality budget;
- Forest roads, in the case of co-financing of reconstruction, for which funds are provided in accordance with the regulations, governing the management of forests.²⁰⁵⁸

From their side, the municipality allocates funds for removal the consequences of natural disasters.

²⁰⁵⁵ Ibid.

²⁰⁵⁶ Ibid.

²⁰⁵⁷ According to art. 8 of the Act on Protection Against Natural and Other Disasters “Region means a geographic, urban or otherwise integrated area comprising two or more local communities which, for the purposes of protection against natural and other disasters, represents a whole.”

²⁰⁵⁸ Large parts of the forests in Slovenia are private.

The Agency of the Republic of Slovenia for Agricultural Markets and Rural Development, subordinated to the Ministry of Agriculture, Forestry and Food, ensures proper and timely payment of the approved funds to final agriculture and food sector beneficiaries, suffered from natural and other disasters.

At an individual level, insurance companies are providing an evaluation of direct material damages due to the personal insurance policies.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Post-disaster assessment is regulated by the Decree on the Damage Evaluation Methodology.²⁰⁵⁹ This Regulation sets out the methodology for determining, assessing and documenting damage and other consequences, caused by natural and other disasters such as earthquakes, floods, landslides, avalanche, high snow, strong winds, sleet, frost, drought, storm, as well as from industrial accidents.

Damages are quantified in five categories:

1. Land: Forests; Agricultural land; Land for construction.
2. Facilities: Buildings (residential and non-residential); Civil engineering - Transport infrastructure (roads, railways, bridges, etc.), Distribution piping for water and wastewater; Waterworks and others; Electricity and telecommunications networks.
3. Fixed and current assets: Fixed and current assets - movable property; The current agricultural production; Orchard.
4. Cultural properties: Cultural and religious buildings, memorials, museums and other; Movable heritage (and other artwork).
5. Other.

Damage is divided into two categories: primary and secondary. Primary damage comprises the main emergency and the attendant costs to restore and set up damaged items in the condition in which they have been initially and the cost of repair and replacement of damaged parts or assemblies. The primary damage also includes the cost of clearing the site of damage, demolition of damaged and unserviceable parts, their removal and the necessary start-up costs. The secondary damage comprises operating costs of protection, rescue and relief and emergency protective or preventive measures for the protection of human, animal and other damaged items. It covers essential safety work, such as buffer embankments, ditches, splints, pumping, removal, spraying, fertilizer and other similar measures.

For post-disaster or accident assessment, the government sets up regional and national damage assessment committees.²⁰⁶⁰ In the committees, judicial officers, insurance evaluator and others authorised representatives of public institutions, professional teams or specialised services, and experts or members of professional associations and other institutions may be appointed. At local level, competent regional committees make the damage assessments.

²⁰⁵⁹ Available in Slovenian language at <http://www.uradni-list.si/1/objava.jsp?urlid=200367&stevilka=3224>.

²⁰⁶⁰ Law on Protection Against Natural and Other Disasters, Art. 97, p. 1.

According to the established procedures,²⁰⁶¹ when an accident occurs, the local community immediately informs the regional notification centre and provides (no later than 24 hours) a written report to the ACPDR's regional branch. ACPDR experts together with local authorities, visit the damaged area and identify the scope and intensity of disasters; based on this assessment, ACPDR issues a resolution for damage assessment, in which the start and end date of the damage assessment are determined. Within this timeframe, local authorities invite affected people to report the damage, filling prescribed sheets, and form a commission to review presented sheets, to assess their objectivity and, if necessary, amend or supplement them. After the expiration of the period, the local commission sends the collected application sheets to the regional committee for review and evaluation. The Regional Damage Assessment Committee sends the applications to the National Damage Assessment Committee, which elaborate a report for the Government. The Government decides on the report and the reimbursement of costs.

1.4.2 Departmental lessons learned systems

The documentation on civil protection in Slovenia does not contain requirements for a specific mechanism for learning lessons from emergencies to be established. However, one of the tasks of the Administration for Civil Protection and Disasters Relief is to produce proposals for improvement of legislation, organisation and procedures, which represents a kind of informal lessons learned practice.

The Law on Protection against Natural and Other Disasters stipulates the rights and responsibilities of the national authorities and local community authorities to use "...data on resources, natural and other disasters hazards, the inhabitants in endangered areas, residential and other buildings, public services, associations and other non-governmental organisations, commercial companies, institutions and other organisations the activities of which are important for protection, rescue and relief, collected and recorded with statistical research programmes or contained in other statistical databases, managed and provided by the national statistical agency and other authorised agencies, responsible for the implementation of mid-term and annual statistical research programmes..."²⁰⁶² The data should be used for the purposes of threat assessment, planning and implementation of protection, rescue and relief. Despite that, such a regulation does not formally establish a uniformed lessons learned system, in practice the huge amount of information, organised as a database, could be successfully used for improving legislation and the organisation of the civil protection. The same law (Art. 51, (6)) defines the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief as the main national source of information on emergencies. ACPDR shall collect and manage data in a form of integrated central databases for the purposes of the preventive programmes planning, emergency management and post-disaster assessments. By law, these data should be shareable and made public, following prescribed procedures.

Information from emergencies is important also for the post-emergency assessments. The above-quoted Procedure for Damage Assessment in Case of Natural and Other Disasters requires general and technical databases to be established. The former include facts, such as location, type of damaged items, address or registered office, ownership, type and time of the accident, damage to a property group, purpose and activities. The technical data from crisis events consists of a description

²⁰⁶¹ Procedure for Damage Assessment in Case of Natural and Other Disasters (ACPDR nb.017-00-23/2005-2 of 09/27/2005).

²⁰⁶² Law on Protection against Natural and Other Disasters, Art. 51, (1).

of the situation and its characteristics, explanation of damaged items depending on their purpose, type, age and technical parameters.

1.4.3 Centralised (national) lessons learned system

The Doctrine on Protection, Rescue and Relief determines the lessons learned from previous accidents as one of the basics for planning and conducting protection, rescue and assistance efforts.²⁰⁶³ Together with the systematic “...interdisciplinary research of causes, forms of phenomena and consequences of disasters...,”²⁰⁶⁴ lessons from each emergency are expected to provide ground for improving the overall civil protection system of the country and any particular hazard as well.

Recently, in Slovenia no institution is explicitly focused on learning lessons from the emergency. However, the country’s civil protection legislation, organisation, practice and traditions stimulate cross-sector learning from past events and provide access to facts, statistics and expertise within the area of learning from emergencies and disasters in order to improve safety work at national and local levels.

As explained in the 2005 Hyogo report, ACPDR has prerogatives to provide a collective overview and assessment of incident and accident trends and safety work in society, thus giving decision-makers and the public a broad and unbiased overview of both emergency and post-disasters situations in different sectors and areas. Such task requires the ACPDR to develop and maintain a reporting system, databases and web applications to collect data, determined by law. As the law regulates the post-disaster assessment as well, the civil protection system also includes an estimation of the economic burden of injuries and damages.²⁰⁶⁵

Slovenia has reported that research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened.²⁰⁶⁶

1.4.4 International exchange for lessons learned

According to Jeraj, Slovenia has signed bilateral agreements on cooperation with neighbouring countries (Austria, Croatia, Hungary, cross-border protocol with Italy), and with Bosnia and Herzegovina, the Czech Republic, Germany, Macedonia, Montenegro, Poland, Slovakia and the Russian Federation. All the aforementioned agreements include provisions on mutual exchange of information and early warning in case of major disasters.²⁰⁶⁷

²⁰⁶³ Doctrine, 2005, Art. 2.3

²⁰⁶⁴ Ibid.

²⁰⁶⁵ 2005 Hyogo report, p. 6-7.

²⁰⁶⁶ According to the National Progress Report on the Implementation of the Hyogo Framework for Action (2011-2013), “Development research work in the area of disaster management has been performed on the basis of target research programme “Knowledge for Security and Peace for the period 2002–2010”, technology programme “Technology for Security and Peace 2006–2012”, individual researches and case studies in relation to the central activities and projects financed in the field of fire protection by the Fire Protection Fund.”

²⁰⁶⁷ Milena Jeraj, *Bilateral and regional cooperation in disaster management – good practices/experiences of Slovenia*, 22nd OSCE Economic and Environmental Forum “Responding to environmental challenges with a view to promoting cooperation and security in the OSCE area,” Vienna, 27 - 28 January 2014. Available at www.osce.org/eea/110805.

Slovenia, as a member of European Union, participates in the EU Civil Protection Mechanism and is also a signatory of the United Nations Convention on the Transboundary Effects of Industrial Accidents.²⁰⁶⁸

According to the European Commission's Vademecum on Civil Protection, in the regional co-operation format, Slovenia participates in the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) and the Adriatic-Ionian Initiative. The country implements the Alpine Convention as regards disaster risk reduction.²⁰⁶⁹

1.4.5 Regular policy reviews

The policy for civil protection as regards disaster management and relief is embodied by the "national programme of protection against natural and other disasters". The national programme "...shall be to set out the aims, policy and strategy of protection against natural and other disasters in the country for a minimum period of five years."²⁰⁷⁰

According to the mechanism of programming (followed by annual planning), the policy review and amendment should be done within the frame of programme review and assessment (the same for the annual plans).

However, there is no available information about policy review in the form of an overall assessment. In some cases, reports on performance during particular emergencies are published – e.g. Annual Reports on Radiation and Nuclear Safety in the Republic of Slovenia, Annual Reports of the Ministry of Defence, and others.

1.5 Resilience

The concept of resilience in civil protection, in terms of country's capacity to withstand shocks due to natural and other disasters, to rebuild itself with efficiency, and to improve on the pre-existing state wherever possible, has not been explicitly established in Slovenia by law or other normative acts.

However, the Slovenian approach towards civil protection from natural and another disaster is focused on four basic aims that form country's resilience policy "by doing":

- Effective decision-making – in Slovenia, it is based on a common understanding that the sectors at the highest risk should be the framework for prioritising the investment policy (in terms of financial, material, human, and political resources and the research agenda) in resilience.
- Efficiency – at this point of time, efficient disaster management steps on a national platform that centralises key data so all state and local institutions, society, the business, and the researchers as well, have access to information that is critical to protecting homes, property, community, regional, and national infrastructure.
- Transparency and openness – Slovenian disaster management framework is aimed to provide greater transparency and to build a culture of openness by removing restrictive barriers on accessing government and local administration plans, performance reports, and specialised database.

²⁰⁶⁸ Slovenia's 2005 Hyogo report.

²⁰⁶⁹ As of 06 December 2015, the source is under reconstruction.

²⁰⁷⁰ Law on Protection Against Natural and Other Disasters, Art. 41, (1).

- Availability – the Slovenian approach towards civil protection is based on the universal right of all citizens and their property, as well as the national and local material values to be protected from natural and other disasters.²⁰⁷¹

1.6 Information sharing and data protection

Collection and protection of personal data related to disaster management, including for preparation, disaster intervention, volunteers, and damage assessment are regulated by the Law on Protection Against Natural and Other Disasters. The law stipulates that the following personal data shall be collected, processed, used and kept by the administrative bodies, responsible for civil protection:

- *“Name and surname, date and place of birth, permanent and temporary residence address, date of birth of children, data on knowledge and skills relevant to protection, rescue and relief, education, employment, telephone number and mobile phone number of the members of the Civil Protection, civil servants in the field of protection and relief and citizens who voluntarily participate in the performance of protection, rescue and relief duties*
- *For the members of the Civil Protection additional data on the date of medical check-up of health and psycho-physical condition, responsibility within the Civil Protection for the purpose of ensuring up-to-date preparations, mobilisation and activation and provision of rights and obligations of the Civil Protection members and other protection, rescue and relief forces;*
- *Type, capacity and condition of means of transport and other means subject to material obligation as well as name, surname, home or business address of owners and users of such means, premises and buildings, for the purpose of completing headquarters, units and services.*²⁰⁷²

The Law prescribes also that the relevant administrative bodies shall keep personal databases on members of the Civil Protection, civil servants in the area of protection and rescue, citizens who voluntarily participate in protection, rescue and relief and persons subject to material obligation. The institutions are responsible for the protection of personal data.²⁰⁷³

The civil protection administration is authorised by law to collect, keep, and communicate above-mentioned personal data to the responsible national or local authority at their request. The relevant commercial companies, institutions and other organisations may request personal data on members of the Civil Protection assigned to them. All authorities, commercial companies, institutions and other organisations may use such personal data only for the purpose of organising protection against natural and other disasters and are responsible for the protection of personal data.²⁰⁷⁴

²⁰⁷¹ Comments based on Dean Myburgh, Chris Webb and Dr Erica Seville, “Enhancing Organizations’ Adaptive Capacity and Resilience Through Effective Decision-Making in the Recovery Phase,” *Continuity Central.com* (2012). Available at <https://www.continuitycentral.com/enhancingresilience.pdf>.

²⁰⁷² Law on Protection Against Natural and Other Disasters, Article 32 Collection and protection of personal data and materials.

²⁰⁷³ Ibid.

²⁰⁷⁴ Ibid., Article 33 Communication of personal data and materials.

2 Legislation

Slovenia's legislation, related to disaster management, comprises conceptual, basic, specific, and emergency laws and acts. The legal framework in the field has been developed after the independence of the country and has been improved based on the accumulated experience in emergency response. Significant improvement of the package of laws has followed Slovenia's membership in the European Union. However, as mentioned earlier, the Slovenian model has some specific aspects and differs from both the European and South-East European countries' civil protection systems. In any case, the legal framework in Slovenia provides systematic planning for risk reduction and relevant preparedness, a comprehensive mechanism for monitoring and alerting, a mixture between professional and volunteer human power, adequate resources and reserves for intervention and recovery.

2.1 Crisis (emergency, disaster) management concept

The core conceptual document on crisis management in cases of natural and other disasters is the Doctrine on Protection, Rescue and Relief. It is a document of the Government of the Republic of Slovenia, issued pursuant to Article 93 of the Law on Protection Against Natural and Other Disasters and adopted at the government's 76th regular session on 30 May 2002. This document is conceptually linked to the country's founding act in the field of security – The Resolution on the National Security Strategy of the Republic of Slovenia, published in OJRS, 56/2001.²⁰⁷⁵

The Doctrine provides a set of common principles on how should protection, rescue and relief be organised within the civil protection system. It also stipulates operational guidance to all professional and volunteer, national and local, state and private forces that based on law or other forms of organised engagement contribute to all or some aspects of the protection against natural and other disasters.

The platform of the Doctrine is that protection against natural and other disasters is a part of the internal security of Slovenia and "...that protection and rescue is, organisationally and functionally, an independent and unified subsystem of Slovenia's national security."²⁰⁷⁶ Out of this starting point, the Doctrine builds a system of integrated or co-ordinated preventive measures, protection operations, emergency services, and other efforts, which cope with the demands of the citizen for security against natural and man-made disasters and extreme conditions.

The document defines the "basic goal of protection, rescue, and disaster relief is to protect people, animals, material and other goods, as well as the environment, against disasters or destruction, damage and other consequences of disasters and to alleviate the consequences." Despite that the Doctrine does not strictly prescribes the most popular in Europe crisis management cycle – prevention and mitigation, preparation, response, and recovery, it includes core activities with similar content: preventive activities, preparedness for action, monitoring, notification and warning system, protection, rescue and disaster relief, and alleviation of the aftermath of disasters.

²⁰⁷⁵ OJ is abbreviation of the name of the Official Gazette of the Republic of Slovenia in Slovenian language.

²⁰⁷⁶ All quotations hereinafter in Chapter 2.1 are from the Doctrine on Protection, Rescue and Relief as it is published at <http://www.sos112.si/db/priloga/p4359.pdf>.

The Doctrine determines that the starting points for planning, organising and conducting protection, rescue and relief efforts and operations should be “...the dangers and threats posed to people, animals, property, cultural heritage, and the environment.”

In terms of disaster management preparedness, the concept includes “...monitoring and researching dangers and methods for protecting against them”, notification and warning, organising, equipping and training of specialised forces and volunteers as well as training of the population for personal and collective protection. Preparation also includes the provision of any kind of material and equipment that could be necessary in cases of emergency. Planning at all levels – national, institutional, local, and business, is also an important component of the country’s preparedness.

The principles of organising and providing civil protection are a combination of bottom-up and top-down approaches. First, in a case of emergency everyone is obliged to provide information to and about the others and to offer assistance to others (based on the Slovenian culture of volunteering). Still, the state and local authorities are obliged to provide the necessary preventive measures and preparation efforts, and, in a case of emergency, to conduct protection, rescue and relief operations.

From an organisational point of view, the Doctrine introduces a mixed system of professional permanent civil protection units and comprehensive network of volunteers – organised and individual. There is a single chain of command system for any rescue and relief operation. “Armed forces and defence assets can be used for protection, rescue and relief efforts if the forces and assets available are not sufficient for emergency rescue and relief and if the armed forces are not needed to conduct defence missions.”

The Police are also engaged in the mechanism of civil protection to “...prevent, detect and investigate criminal offences and violations, detect and apprehend perpetrators and other wanted persons and deliver them to competent bodies, maintain law and order, control and organise traffic and the movement of persons, participate in securing dangerous areas or accidents, conduct certain missions concerning foreigners and, if required, participate in rescue missions.”²⁰⁷⁷

2.2 General crisis (emergency, disaster) management law

The new legislation that framed Slovenia’s policy and organisation for disaster management was adopted after 1992 and has been conceptually and operationally amended after 2000. The number of legal acts has “...separated the system of protection against natural and other disasters from the defence system in order to organise it as an integral interdisciplinary activity based on common goals and principles, and to merge all rescue services and other protection, rescue and relief forces into an organisationally and functionally unified system.”²⁰⁷⁸ This approach has been applied to make the previous highly centralised and militarised system more flexible for inter-agency co-operation, more decentralised between the state and local authorities, and more open for extensive engagement of volunteers, NGOs and the business. Formally and legally prevention has become the fundamental guideline and major task of this system with implementation being carried out mainly by the local communities.

Recently, the protection from natural and other disasters in Slovenia is governed through a package of legal acts – laws (acts), different Government decisions (decrees), and a variety of sector-specific regulations. The most important between them is the Act on the Protection Against Natural and

²⁰⁷⁷ Doctrine, 2005, Article 6.5.

²⁰⁷⁸ Hyogo, 2005.

other Disasters (Published in the Official Gazette of the Republic of Slovenia No 64/94, dated 14 October 1994). It has been approved by the Parliament on 3 May 2006 and since then serves as a hub between the conceptual Doctrine on Protection, Rescue and Relief and variety of sector-specific regulations as the Fire Protection Act,²⁰⁷⁹ the Fire Service Act, the Recovery from the Consequences of Natural Disasters Act, the Environment Protection Act, the Protection Against Drowning Act, and others, as well as several general laws as Public Administration Act, Material Obligation Act, and others.

The Act on the Protection Against Natural and other Disasters sets the principles, architecture and key procedures for disaster management in a systematic manner:

- The scope of protection, provided through the Law, includes “...people, animals, property, cultural heritage, and natural environment.” (Art. 1)
- In protection, priority is given to the “risk reduction” (despite that the Law does not use the term), achievable through measures to reduce both the number of disasters and the number of casualties and other consequences.
- The established system for civil protection comprises programming, planning, organisation, implementation, supervision, and financing of measures and activities in implementation of Government’s policy and strategy on protection against natural and other disasters.
- The Law defines variety of basic tasks of the protection system that make it comprehensive and complicated, including detection, monitoring and research of natural and other disaster hazards, prevention measures, notification and warning of people, education and training, organisation of Civil Protection, mechanism for mobilisation in cases of emergency, rescue and relief, recovery, post-disaster damage assessment, as well as participation in international disaster management efforts.
- Civil Protection is both a service and an institution. The service might be mandatory, volunteer, and by contract. Mandatory service starts at 18 and ends at 55 for women, and at 63 for men while the volunteer starts at the age of 15. The contract service is in the Civil Protection units or is performed by individual contract for people that have been designated for highly specialised subject-matter duties. The organisation comprises of management bodies, protection, rescue and relief units and services, protection and rescue equipment and facilities for protection, rescue and relief. Thus, Civil Protection is “a special-purpose element of the system of protection against natural and other disasters.” (Art. 3)
- The core principles of providing protection include the right of every person of receiving protection, requirement for mutual assistance in emergency, the right of people to be timely and consistently informed about hazards and emergencies, dominant prevention and risk reduction measures, the principle of personal, corporate and official responsibility for implementation of protection measures and activities, gradual deployment of units and resources in emergency, and relevance of all protective legislation and practice to the international humanitarian law and international law on the protection of people, animals, cultural heritage and environment against harmful effects of natural and other disasters and pursuant to the accepted international obligations.
- The Law determines the responsibilities of the state, local authorities, commercial subjects, institutions, and private persons (as owners and users of buildings and other infrastructure).

²⁰⁷⁹

Available at <http://www.sos112.si/db/priloga/p4361.pdf>.

- Long-term planning for disaster management is arranged through a national programme for a minimum period of five years and an annual plan. The local communities adopt their own programmes and plans of protection against natural and other disasters, which must not be in contradiction with the national programme.
- Emergency plans are elaborated at the national level by the Administration for Civil Protection and Disaster relief, and at the local level by the relevant authorities. Commercial units also prepare such plans.
- The notification and warning system is comprehensive and includes state, ministries and agencies, regional, and local elements, supported by all-citizen contribution. At the head of the system is the Emergency Notification Centre of the Republic of Slovenia, supported by regional notification centres.
- Implementation of protection policy is performed by “...units, services and other operational structures of associations and other non-governmental organisations; commercial companies, institutions and other organizations; Civil Protection units and services;²⁰⁸⁰ the Police; the Slovenian Armed Forces in accordance with the law.” (Art. 72)
- The Law prescribes wider role to civil society volunteer organisations and associations and commercial entities in each aspect of the civil protection.
- The administrative and technical duties relating to protection, rescue and relief and other duties within the protection against natural and other disasters are dedicated to the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief and its regional branches.
- National commander, to whom local commanders are subordinated, commands Civil Protection through a single chain of command.
- Post-disaster damage assessment is organised at national and local levels.
- The Law stipulates variety of requirements for providing safety at work and home.
- Education and training on protection are comprehensive and includes schools and all people, institutions and formal units. Training Centre for Civil Protection and Disaster Relief of the Republic of Slovenia is established.
- Funding of civil protection is provided through the state and local budgets, insurance premium, financial resources of commercial companies, institutions and other organisations, as well as by voluntary contributions and international aid.
- Penalty provisions are determined for violation of civil protection rules.
- The Law also introduces several EU directives.²⁰⁸¹
- Control over the implementation of laws governing the protection system is executed by the constituent body of the Ministry of Defence: the Inspectorate of the Republic of Slovenia for Protection against Natural and Other Disasters, and its branch offices.

2.3 Emergency rule

The Law on Protection Against Natural and Other Disasters does not treat the emergency rule issue, as it is regulated by the Constitution. According to art. 92:

²⁰⁸⁰ Art. 76 delivers a description of civil protection units and services.

²⁰⁸¹ The relevant EU Council Directives are 89/391/EEC, 89/618/EURATOM, 96/29/EURATOM, and 96/82/EC.

A state of emergency shall be declared whenever a great and general danger threatens the existence of the state. The declaration of war or state of emergency, urgent measures, and their repeal shall be decided upon by the National Assembly on the proposal of the Government.

The National Assembly decides on the use of the defence forces.

In the event that the National Assembly is unable to convene, the President of the Republic shall decide on matters from the first and second paragraphs of this article. Such decisions must be submitted for confirmation to the National Assembly immediately upon its next convening.

The Constitution (Art. 16) regulates the scope of limitations on individual rights and liberties during a “state of emergency” in the following way:

Human rights and fundamental freedoms provided by this Constitution may exceptionally be temporarily suspended or restricted during a war and state of emergency. Human rights and fundamental freedoms may be suspended or restricted only for the duration of the war or state of emergency, but only to the extent required by such circumstances and inasmuch as the measures adopted do not create inequality based solely on race, national origin, sex, language, religion, political, or other conviction, material standing, birth, education, social status, or any other personal circumstance.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

To ensure the implementation of the above-mentioned sector-specific laws, the Government issues decisions, including the following: Decree on Fire Insurance Tax, Decree on Protection from Fire in a Natural Environment, Decree on Shelter Construction and Maintenance, Decree on the Organisation and Functioning of the Monitoring, Notification and Alarm System, Decree on Providing Protection, Rescue and Relief from Aircraft, Decree on the Organisation, Equipment and Training of Protection, Rescue and Relief Forces, and others.

The operational document that integrates the implementation of all legal acts into a civil protection effect for the people and the state is The Resolution on the National Programme of Protection Against Natural and Other Disasters for 2009-2015.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

All issues, related to the regional and local authorities obligations and rights are regulated by the Act on the Protection Against Natural and Other Disasters. According to art. 37, local communities shall be responsible for the implementation of protection against natural and other disasters on their territories. They may co-operate with each other including sharing resources and capabilities and for protection, rescue and relief operations.

The local communities are responsible for:

- Management of all systems for civil protection on their territory;
- Systematic monitoring of all hazards;
- Notification and warning of the population;
- Drafting, resourcing and implementing of all required by Law plans and co-ordinating them with the neighbouring communities;
- Establishment of relevant to the hazards organisation for civil protection;

- Providing those organisations with resources, equipment and training;
- Providing basic conditions of living for affected by natural and other disasters people;
- Participating in international co-operation in protection, rescue and relief.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The commercial companies, private institutions and other organisations have legal obligations according to art. 38 of the Law on Protection Against Natural and Other Disasters. Especially those that operate with hazardous substances shall elaborate a threat assessment, draft emergency response plans and implement them on their own expenses. This includes responsibilities to organise necessary rescue and relief forces, ensure notification and warning of employees and the surrounding population of danger and co-finance preparatory activities of the local community proportional to the extend and degree of threat constituted by their activity. The local authorities determine the type and the proportional scope of preparations in emergency response plans of commercial entities. They are also obliged to engage the personnel in relevant to the case specific hazards training.

The same requirements are spread also over any educational institution.

The Law on Protection Against Natural and other Disasters regulates all issues, related to the organisation and engagement of volunteers in any rescue and relief operations. Volunteerism is a national tradition in Slovenia and volunteers and other non-professional contributors have important role within the overall civil protection system. Reasonably, their status in case of emergency is equalised with those of the members of the Civil Protection service. Those that formally, through the planning process, are engaged in civil protection organisations as fire brigades, Red Cross organisations, Mountain Rescue Service, speleologists clubs, diving clubs, canine clubs, scout organizations, radio-amateurs clubs and other organisations) shall not be assigned to defence duties or Civil Protection operations.²⁰⁸²

Concerned the role of the NGOs in civil protection there two basic acts: the Act on Slovenian Red Cross (published in OJ RS, 7/93) and the Societies Act (published in OJ RS, 61/06).

2.7 Legal regulations for international engagements of first responders and crisis managers

Both the Law on the Protection Against Natural and other Disasters and Doctrine on Protection, Rescue and Relief regulate the international contributions and engagements of Slovenia in form of international aid.

Assistance to other countries is carried out by designated units. However, the Law provides an opportunity a separate operational structure to be organised for the performance of protection, rescue and relief in other countries. In both cases the Administration for Civil Protection and Disaster Relief is mandated to make proposals to the Government.

The decision to assist other countries is mandated to the Government on the proposal of the Civil Protection Commander of the Republic of Slovenia or the Minister of Defence, if it is related to international obligations of the state. However, they must perform duties that only correspond to the international and legal status of the Civil Protection.

²⁰⁸²

In times of war these units, together with Civil Protection units, perform civil defence functions.

Members of such units must be informed (through the contract) of the possibility that they might be deployed to other countries to perform their duties. Insurance for cases of death, permanent loss of general ability to work and temporary inability to work have to be provided for all of them.

3 Organisation

3.1 Organisational chart

The fundamental tasks of the protection system of Slovenia are 1) prevention, 2) warning, and 3) protection against natural and other hazards through 4) rescue and relief operations during disasters, 5) provision of basic living conditions after disasters and 6) reconstruction measures.

The system has been built and includes the whole range of activities carried out on the national and local (municipal) levels.²⁰⁸³ Between, there is a regional level of administrative structures (so-called urban municipalities, which are 13), aimed to provide better co-ordination when more than two local areas are affected by any kind of disaster. Moreover, with the Act on Protection against Natural and other Disasters have been established obligations to commercial companies, institutions and other organisations that, within the scope of their activities, are responsible for implementing of emergency measures, and as well as to the citizens for their private protection. At the state level, obligations and rights to introduce measures and take interventions have been assigned to the Government as a whole and to particular ministries. The leading role between them is for the Ministry of Defence – within its structure, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR) has been established by law in 1991 as the main national administrative body for disaster management.

According to Slovenia's report to the World Conference on Disaster Reduction,²⁰⁸⁴ the management and administration of the system has been layered the following way:

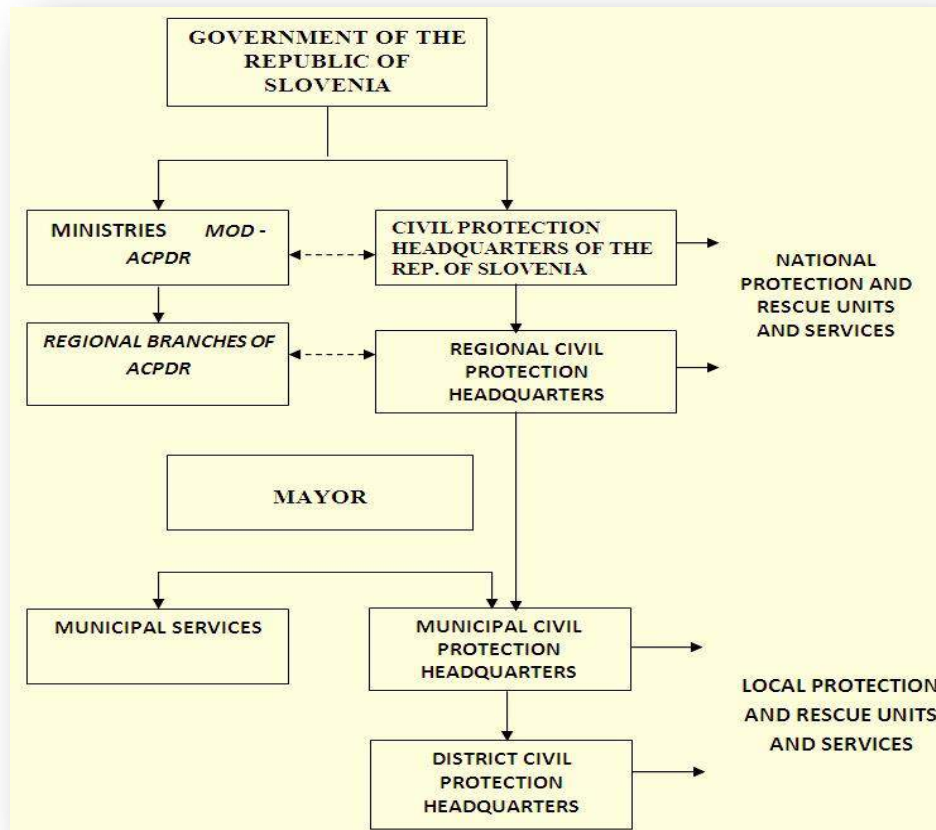
The National Assembly lays down the basic guidelines for organising and implementing protection against natural and other disasters at the national level, adopts the national programme of protection against natural and other disasters and supervises its implementation, and secures funds for the reparation of the effects of major natural disasters.

The government guides and co-ordinates the organisation, preparation and implementation of protection against natural and other disasters at the national level, adopts the annual plan of protection against natural and other disasters and national protection and rescue plans, manages the protection, rescue and relief and reparation of the effects of major natural and other disasters, and regulates international disaster relief. The government also guides and co-ordinates the operations of the Ministries responsible for the implementation of measures and the prevention of natural and other disasters and their consequences, along with states of readiness and the adoption of measures in the areas under their jurisdiction.

Operational management of civil and other protection, rescue and relief forces is organised and carried out as a uniform national system. Civil Protection commanders, headquarters and heads of intervention and rescue units carry it out. The municipalities operate and manage the system of protection against natural and other disasters independently in their areas. Professional protection, rescue and relief tasks are carried out by the municipal administration.

²⁰⁸³ There are 211 municipalities in Slovenia.

²⁰⁸⁴ 2005 Hyogo report.



Council for Protection
Against Natural and
Other Disasters
(2014)

Figure 43: Organisational chart of the Slovenia's disaster management system.²⁰⁸⁵

Within this architecture, the lines of command, control and reporting have been organised the following way:

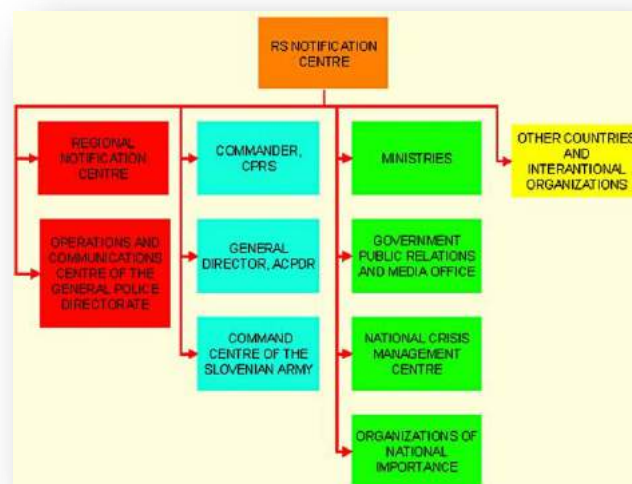


Figure 44: Lines of communication.²⁰⁸⁶

²⁰⁸⁵ EC Vademecum on Civil Protection, http://ec.europa.eu/echo/files/civil_protection/vademecum/si/2-si-1.html#orga; and Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015).

According to the Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015), the Government has established a Council of the Government of the Republic of Slovenia for Protection Against Natural and Other Disasters. The new body (since 24th July 2014) has been founded as an advisory body to the Government on protection against natural and other disasters. The Council shall function as a National Platform for Disaster Risk Reduction.²⁰⁸⁷

As a permanent co-ordinating body at national level, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR) is charged with the following administrative and technical duties:

- *“Elaboration of proposals of research and development projects relating to the protection against natural and other disasters;*
- *Elaboration of the proposal of the national programme and plan of protection against natural and other disasters;*
- *Providing for the organization and operation of the monitoring, notification and warning system;*
- *Elaboration of threat assessments and other technical documents for the planning of protection, rescue and relief and directing and coordinating of measures for the prevention and mitigation of consequences of natural and other disasters;*
- *Monitoring and announcing of danger of natural and other disasters and giving instructions for handling;*
- *Elaboration of national emergency response plans in co-operation with ministries and governmental services;*
- *Organisation, equipment and training of national Civil Protection units and services and other protection, rescue and relief forces and provision of conditions for the work of the commander, the Headquarters of the Civil Protection of the Republic of Slovenia and the national and regional damage assessment committee;*
- *Monitoring and co-ordination of the organisation of the Civil Protection and other protection, rescue and relief forces;*
- *Elaboration of programmes as well as organization and delivery of education and training for protection, rescue and relief;*
- *Creation and maintenance of national material reserves for the case of natural and other disasters.”*²⁰⁸⁸

ACPDR is divided into six units and is based in Ljubljana.²⁰⁸⁹

- Office for Prevention and Operations:
 - Sector for monitoring and alarming, including National Notification Centre;
 - Sector for Planning, Operations and Damage Assessments;
 - Sector for Fire Prevention, Protection and Fire-fighting;
- Office for Education and Training:

²⁰⁸⁶ EC Vademecum.

²⁰⁸⁷ Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015). Available at http://www.preventionweb.net/files/41665_SVN_NationalHFAprogress_2013-15.pdf.

²⁰⁸⁸ Law on Protection Against Natural and Other Disasters, Art. 102.

²⁰⁸⁹

See

www.mo.gov.si/en/about_the_ministry/organization/administration_of_the_republic_of_slovenia_for_civil_protection_and_disaster_relief/ and <http://www.sos112.si/eng/>.

- Sector for Education and training;
- National Training Centre for Civil Protection and Disaster Relief and Fire-fighting school;
- Sector for Information and Communication;
- Department for General Affairs;
- Department for International co-operation and EU affairs.

According to the ACPDR web site, the unit has subordinated “...13 other ACPDR-branches operating throughout Slovenia. Within each branch, there is a regional notification centre that performs a 24-hour duty service. Altogether, 300 people are employed at the ACPDR branches and notification centres.”²⁰⁹⁰

Protection, rescue and relief forces at various levels (municipal, regional and national) are professional and volunteer and include also Civil Protection and certain companies, institutions and other organisations, which are, given the nature of their activities involved in this system:²⁰⁹¹

- The volunteer forces are the volunteer fire brigade, Red Cross, Slovenian Caritas, divers, dog-handler units, girl and boy scouts, scouts, amateur, broadcasters, Mountain Rescue Service, Cave Rescue Service and others.
- Professional emergency services include professional fire-fighters, public health services, public social welfare services, public veterinary services, environmental laboratory, mine rescue units, emergency rescue for disasters connected to corrosive substances, mobile meteorological unit, public utilities, regional and government public services and contract organisation.
- Civil protection is organised as a specific and deliberate part of protection and relief system and includes first aid teams, units for veterinary first aid, technical rescue units, units for radiological, chemical and biological defence, services for maintenance and usage of shelters, unit for protection against unexploded ordnance, unit for triggering avalanches, rescue unit for rapid intervention and support services.

Duty bound units and services for the protection, rescue and relief operations are organised on the basis of civic duty (units and departments of Civil Protection service). According to the Regulation on Organising, Equipping, and Training Forces for Protection, Rescue and Aid the following structure has been established:²⁰⁹²

- Units for first aid;
- Units for the first veterinary assistance;
- Technical rescue units;
- Units for radiological, chemical and biological (RCB) protection;
- Units for protection against unexploded ordnance;
- Units for use shelters;
- Service triggering avalanches;
- Support Services;
- Civil Protection commanders and their deputies and staffs of the Civil Protection;
- Commissioners for Civil Protection and their deputies;

²⁰⁹⁰ ACPDR, “Regional Offices,” <http://www.sos112.si/eng/>.

²⁰⁹¹ EC Vademecum.

²⁰⁹² EC Vademecum.

- Information centres;
- Logistics centres;
- Other units and departments.

Civil Protection itself is organised at the national level, regions, municipalities, institutions and commercial companies. At the state level, the Headquarters of the Civil Protection of the Republic of Slovenia and the National Unit for Rapid Intervention (in Slovenian – EHI) have been established. The latter is designed to perform specific difficult tasks in the field of protection and rescue in Slovenia and for providing international assistance to other countries in need. At the level of municipalities, staffs, units and departments of Civil Protection are organised differently. The structure depends on dominant regional threats, protection and rescue plans and the number of members of professional and volunteer units.

The Police and Slovenian Armed Forces are seen as “the last resorts” for natural and other non-violent disasters. According to the Law,²⁰⁹³ the Police participate in the tasks of protection, rescue and relief in accordance with the law, particularly in providing security, public order, public peace and cooperation in rescue operations by helicopters and other forces.

Slovenian Armed Forces participate in the tasks of protection, rescue and relief in accordance with the law, their structure, equipment and ability. In carrying out the tasks aviation units, units for nuclear, chemical and biological defence, engineering units, medical service and other units (if they are not engaged in carrying out defence duties) are involved. The table below illustrates the use of military helicopters for search and rescue operations and other civil protection in 2013-14:

Table 29. Use of Slovenian Armed Forces helicopters for search and assistance in 2013-14.²⁰⁹⁴

Number of Rescue Operations/ Injured Persons and Total Flying Hours	2013	2014	Change index
Mountain Rescue	85	88	104
Helicopter Emergency Medical Assistance	56	76	136
Wildfires and Disasters	14	25	179
Total Number of Rescue Operations	155	189	122
Total Number of Helicopter Flying Hours	257	270	105
Total Number of Injured Persons	145	176	121

3.2 Organisational co-operation

At the international level, in Slovenia, the importance of cross-border cooperation is considered in the five-year National Programme as the highest policy and planning document for disaster man-

²⁰⁹³ Law on Protection Against Natural and Other Disasters, articles 14 and 79.

²⁰⁹⁴ Annual Report of the Ministry of Defence for 2014. The “change index” illustrates the level of increase of the parameter (index 104 means increase with 4%).

agement, and defined in the main legislative act – the Law on Protection against Natural and other Disasters.

According to an official report, “Joint bilateral committees and sub-committees for cooperation between Slovenia and neighbouring countries have been established, such as joint committees led by director-generals of the competent national organisations and experts” sub-committees (i.e. for the prevention and preparedness of forest fires; early warning and notification, including the emergency call number 112; emergency response plans for joint risks at bordering regions; education and training).” Joint project teams have been established as well.²⁰⁹⁵

The principal areas of international organisational co-operation include:

- Early warning and notification on emergencies;
- Information exchange on hazards and emerging threats;
- Sharing of knowledge and experience;
- Joint education, training and exercises;
- Mutual assistance in case of disasters;
- Co-operation in international disaster response interventions;
- Co-operation within EU and NATO, and others.

According to the Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015),²⁰⁹⁶ bilateral agreements have been signed with the neighbouring Austria, Croatia, Hungary, and Italy, as well as with Bosnia and Herzegovina, Czech Republic, Germany, Montenegro, Poland, Slovak Republic, Russian Federation. In addition, intensive bilateral co-operation, particularly in the field of education and training, is ongoing with France, Sweden and the United States of America.

Standard operating procedures with Croatia to assist the aircraft on fire in an open space that defines the mutual exchange of information on hazards and fires in the border area has been signed in 2013.

An agreement is negotiated with Serbia. Co-operation has been arranged also with Albania and Kosovo.

Slovenia is also very active in the regional DPPI SEE and, together with Croatia, led the Disaster Management Training Programme, in which more than thousand participants from South-Eastern Europe have been educated and trained in disaster management.

The Administration of the Republic of Slovenia for Civil Protection and Disaster Relief is responsible for developing projects and research activities in support of the civil protection system improvement. It delivers a special emphasis on building capacity for mutual reinforcement at both horizontal (inter-agency) and vertical (state-regions-municipalities) operational levels.

The Administration is also co-ordinating and implementing the international co-operation activities of Slovenia in disaster management with neighbouring and other countries, as well as with regional initiatives, international organisations and the EU. It provides and co-ordinates rescue assistance in the event of major disasters abroad.

According to the 2014 Annual report of the Ministry of Defence, the international engagement of the Slovenia civil protection capabilities is the following:²⁰⁹⁷

²⁰⁹⁵ Jeraj (2014) provides information on seven international projects.

²⁰⁹⁶ Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015).

²⁰⁹⁷ Ministry of Defence Annual report for 2014.

At the end of May and beginning of June 2014, in accordance with the decision of the Slovenian Government, the SAF took part in rescue and assistance operations abroad (Bosnia and Herzegovina and Serbia) organizing and carrying out the transport of humanitarian aid and helicopter emergency response operations in flooded areas. Six convoys for the transport of humanitarian and other assistance to the affected areas were organised, with 110 vehicles transporting 705 tons of cargo. A SAF company with 120 members, who participated in the EUFOR joint military exercise in Bosnia and Herzegovina during the operations for the mitigation of flood consequences, were actively involved in those operations in June. Company members removed debris, disinfected public areas and facilities (nurseries, primary and secondary schools, health centres, municipalities) and analysed water and soil.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The principal source of standing operating procedures (SOPs) is the Ministry of Defence of Slovenia as disaster management is under its supervision.

SOP for fire-fighting has been developed in 2011 when a document, “Operativni Taktični Postopki”²⁰⁹⁸ (Tactical Operational Procedures) was adopted. It is about 13 professional fire departments, 1299 active volunteer fire fighting societies and 68 volunteer industrial fire-fighting societies. They are linked in 120 local and regional fire-fighting associations, which are all covered by the umbrella organisation, the Fire Fighting Association of Slovenia. Every fire department has operational units, which are classified into a range of categories according to the risks of fire in concrete areas.

SOP for nuclear, radiological, chemical, and biological protection (Standardni operativni postopek (SOP) za jedrsko, radiološko, kemično, biološko (JRKB) zaščito) was adopted in 2007.

Under the umbrella agreement between the governments of Slovenia and Croatia on cooperation in protection against natural or civil disaster, signed in 1997, standard operating procedure for the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief and National Protection and Rescue Directorate of the Republic of Croatia was introduced in 2014. SOP is about providing assistance with aircraft in cases of fires in open space. The document guides information sharing and co-operation procedures for providing cross-border assistance with specialised aircraft. It is aimed to allow faster and more co-ordinated response to potential fires, especially in the border area.

Other forms of SOPs are the plans for emergency response that are developed at the state level and for each region. (See Chapter 4.2)

SOPs are provided also through officially issued by the Administration for Civil Protection and Disaster Relief instructions for citizens:²⁰⁹⁹

- Emergency food supply;
- Measures to take in the event of an earthquake;
- Measures to take in the event of a flood;
- Measures to take in the event of heavy snowfall;
- Protection against avalanches;
- Protection against lightning;
- Measures to take in the event of a fire in the natural environment;
- Measures to take in the event of a fire in a building;
- Measures to take in the event of the use of chemical weapons;
- Measures in the event of an accident involving chlorine;
- Protection against radiation;
- Measures to take in the event of the outbreak of a communicable disease;

²⁰⁹⁸ The document is available in Slovenian language at www.gasilec.net/modules/simplemod/datoteke/0-Operativno%20takticni%20postopki/RRN%20OTP.pdf.

²⁰⁹⁹ Hyperlinks to the instructions are provided.

- Measures to take in the event of an airstrike;
- How to prepare and use a shelter/refuge;
- Measures to take if you encounter unexploded ordnance;
- First psychological aid;
- Giving first aid;
- How to ensure healthy drinking water.

SOPs have been tested by both national and international exercises and through international exchange in forms of seminars and conferences.

4.2 Operations planning

According to the Hyogo, 2005, “Protection and rescue plans are drawn up by state bodies, local communities, commercial companies and other organisations. The plans are drawn up in accordance with the Decree on Content and Drawing up of the Plans for Protection and Rescue.”²¹⁰⁰ The relevant responsible bodies must adopt the plans – the Government adopts national protection and rescue plans, and local community plans – by mayors. The adopted protection and rescue plans have to be made public, particularly to threatened people and to other publics with a vested interest.²¹⁰¹

Protection and rescue measures must be drawn up for each individual type of disaster. The plans should define:

- Individual type of disaster for which plan is elaborated;
- Extent of planning;
- Concept of protection, rescue and disaster relief for the disaster for which plan was elaborated;
- Management and leading;
- Measures and tasks of protection, rescue and relief;
- Personal and mutual protection;
- Explanation of terms and abbreviations;
- Necessary forces and means and resources available;
- Organisation and implementation of monitoring, warning and alarming;
- Mobilisation of forces and resources.

Supplements and attachments to the plan are:

- Plans of activities of executors of the protection and rescue;
- Database needed for implementation of the plan;
- Programme of qualification, training and exercises;
- Instruction for maintenance and distribution of protection and rescue plan.

The national protection and rescue plans are drawn up by the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief in co-operation with the ministries and other national bodies. On the national level, protection and rescue plans for the potential large-scale disasters are drawn up that could affect several communities or regions. The following plans have been prepared:²¹⁰²

²¹⁰⁰ 2005 Hyogo report, Component 5.1.

²¹⁰¹ 2005 Hyogo report.

²¹⁰² Hyperlinks to the available plans are provided.

- Emergency Response Plan in the event of Aircraft Accident;
- Emergency Response Plan in the event of an Earthquake in the Republic of Slovenia;
- Emergency Response Plan in the event of Floods;
- Nuclear Emergency Response;
- Emergency Response Plan in the event of Railway Accident;
- Emergency Response Plan in the event of Accidents at Sea;
- Emergency Response Plan in the event of Terrorist use of Weapons or Means of mass Destruction and/or in the event of Terrorist Attack with Conventional Means;
- Protection and Rescue Plan in a case of multiplicative appearance of contagious disease at animals;
- Military Aggression Protection and Rescue Plan.

Plans are drawn up based on the following information:

- Risk assessments;
- Analysis of vulnerability;
- Studies.

The planning scheme by different entities reflects the levels of the civil protection system (Table 7).

Table 30. Levels of disaster management planning.²¹⁰³

Threat, disaster	Company	Municipality (local)	Urban municipality (region)	State (national)
Earthquakes	-	X	X	X
Floods	-	X	X	X
Heavy snow	-	X	X	X
Fires	X	X	-	-
Landslides and avalanches	-	X	X	-
Nuclear accidents	X	X	X	X
Accidents, involving hazardous substances	X	X	X	X
Air crashes	X	-	X	X
Railway accidents	X	X	X	-
Tunnel accidents	-	X	X	-
Cable-car accidents	X	-	-	-
Mining accidents	X	-	-	-
Contagious disease at animals	X	X	X	X
War	-	X	X	X

²¹⁰³ 2005 Hyogo report, p. 25; website of the Administration of Civil Protection and Disaster Relief.

4.3 Logistics support in crises

The Slovenian authorities see logistics as one of the emergency management systems along with monitoring, information, and communication systems. It is determined by the Law on Protection Against Natural and Other Disasters and has been established through the mechanism of the National Programme of Protection Against Natural and Other Disasters (Art. 41).

The Law prescribes eventual military logistic support from the Slovenian Armed Forces under the following conditions: “Where the available forces and resources are insufficient in order to carry out the necessary rescue and relief operations, armed forces and defence resources may be deployed, provided that such armed forces are not indispensable for defence operations.” (Art. 14)

Administration of the Republic of Slovenia for Civil Protection and Disaster Relief is responsible for the organisation and equipping of national civil protection units and services, provision of guidelines for the development and readiness of all public rescue services within national jurisdiction and co-funding of fire-fighting units that are of great importance for society and other organizations and societies. Under its command, the National Logistic Centre is dedicated to creating and maintain relevant as quantity and specifications national reserves of material assets for protection, rescue and relief purposes.

The Slovenian Armed Forces include a Logistics Brigade (deployed in the town of Kranj), which is able to provide logistics support in case of any type of natural or man-made disaster. It includes two logistics regiments and a Military Medical Unit. Despite that the brigade itself is not deployable abroad, the Slovenian military is engaged in an active international co-operation with the US and other NATO forces on emergency logistics not only for wartime but also for delivery of humanitarian support abroad.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The monitoring, notification and warning system is comprised of monitoring network, notification centres, computer support and telecommunications service and warning. The Administration for Civil Protection and Disaster Relief is the headquarters of the communications and information support.

The Slovenian national report and information on disaster reduction for the world conference on disaster reduction provides the following information about the country’s crisis communications:

A uniform (autonomous) system of operational radio communication (ZARE) and personal calls (pagers) is used in the administration of protection, rescue and relief operations. The ZARE is used by all rescue services. The communication centres of this system are located in regional information centres and are used to connect users to public and other telecommunication systems.

The ZARE radio communication system operates in the VHF range. There are 32 semi-duplex channels available for over 40 upper transmission layer repeaters and 36 simplex channels for direct connections. The pagers system consists of 40 upper layer transmitters and 50 lower layer transmitters. The ZARE system provides adequate protection against disturbance (sub-tone) and abuse (ID code). Plans for a gradual transition to a new beam radio communication system have been established.

*Computer network and information support integrate all 13 regional notification centers and the Education, the Training Center, and the Administration for Civil Protection and Disaster Relief into one computer network. It serves the needs of the centers so they can ensure protection against natural and other disasters. For major connections, we use leased virtual transmission ways via the Internet, which allow for a smooth increase in transmission speed on an as needed basis. Information support is provided through tailor made computer applications in the regional notification centers, such as the Geographic Information System (GIS-Ujme), the sound alarm management and triggering system (DUNJA), the system for the acceptance of telephone calls (ROK), the radio traffic control system (KC08), the radio network control system (Nadzor ZARE) and the pager system (ZAPP). All the systems are linked into a uniform application used for the management of interventions (SPU112). There are also web applications available in the computer network, such as GIS and hazardous materials.*²¹⁰⁴

The emergency call number “112” has been used in Slovenia since the beginning of 1997. All citizens can use this number in an emergency or if they need a fire brigade, emergency first aid or aid from any other rescue services. In addition, by dialling this number, people can obtain other important information on weather, water, snow and other conditions, disturbances and interruptions in the supply of potable water and electrical and other energy sources and other areas of life importance. According to the Slovenian Ministry of Defence’s annual report for 2011, a StatKlic application was introduced in 2011 and the E-CALL upgrade should have been completed in 2012.

²¹⁰⁴ Hyogo, 2005, p. 16-17.

5 Capabilities

5.1 Human resources

Human resources for civil protection in Slovenia are managed under the Government's Decree on the Organisation, Equipment and Training of Protection, Rescue and Relief Forces of 2007 (amended in 2009 and 2011) and the Decree on Service in Civil Protection (2008).

According to the Ministry of Defence, at the end of 2014, the Civil Protection had listed more than 40 000 members of the Protection, Rescue and Relief forces (PRR). Of them, there have been about 22 000 members of duty units and about 18 000 volunteers. National PRR forces have consisted of 840 professionals, 1 200 volunteers and more than 1 505 members of duty units.²¹⁰⁵

Table 8 presents the numbers of personnel of the Headquarter of the Civil Protection of the Republic of Slovenia and the National Unit for Rapid Intervention at the state level (see also Chapter 3.1). Table 9 shows how the members of the Civil Protection are distributed through the regions.

However, the report states that due to budgetary constraints, the Administration for Civil Protection and Disaster Relief is far from providing the necessary highly qualified professional staff even for the most critical duties.

Protection, rescue and relief tasks are performed by volunteer and other nongovernmental organisations and their operational units in response to decisions made by the competent body at the local or national level if they meet the required personnel and material/technical conditions. These organisations include:

Table 31. State level Civil Protection personnel.²¹⁰⁶

Structure		Number of personnel
Headquarter of the Civil Protection of the Republic of Slovenia		21
National Unit for Rapid Intervention		176
From them	Command	7
	Unit for Technical Rescue	73
	RCB Protection Unit	23
	Unit for First Medical Aid	8
	Unit for Technical Diving	20
	Unit for Supplying	39
	Section for Electricity	4
	Section for water	2

²¹⁰⁵ Ministry of Defence Annual Report for 2014, p. 24.

²¹⁰⁶ Sistem Varstva Pred Naravnimi in Drugimi Nesrečami, www.sos112.si/db/priloga/p6709.doc.

Table 32. Civil Protection members by regions (2008).

Region	Number of contractors
Brežice	115
Celje	132
Koper	102
Kranj	117
Ljubljana	120
Maribor	121
Murska Sobota	104
Nova Gorica	124
Novo Mesto	100
Postojna	103
Ptuj	100
Slovenj Gradec	107
Trbovlje	106

- Slovenian Fire-fighting Association:²¹⁰⁷ In all 212 municipalities of Slovenia there are public fire services. Fire service is obligatory local service with no headquarters on the national level. Local Fire-fighting Chief is responsible to the mayor for preparedness, management, command and control of the Fire service. The number of volunteers is approximately 113,000 members, 44,000 of them active. There are nearly 500 professional fire-fighters and another 300 professional fire-fighters that work in industrial enterprises. All fire brigades include a fire-fighting unit trained and equipped to extinguish fires and provide rescue services in the event of a fire or other disaster. The Fire brigades are linked together by municipal and regional fire-fighting associations, which together form the Slovenian Fire-fighting Association. The Slovenian Fire-fighting Association became a member of CTIF (International Technical Committee for the Prevention and Extinction of Fire) since 1992.
- Slovenian Red Cross (SRC): As a non-governmental, non-political non-profit humanitarian organisation, the Slovenian Red Cross is primarily responsible for the areas of health and social welfare. Its volunteers see to the implementation of social welfare, health education and first aid programmes, blood donation, investigation services, and assistance to high-risk groups within the population. The Law on the Slovenian Red Cross (Art. 9) authorises the Red Cross to perform the following tasks:
 - Tasks related to informing, recording and inquiring about the victims of armed conflict and persons afflicted in natural and other disasters;
 - Organising the training of staff for the performance of tasks arising from the Geneva Conventions;
 - Organising first-aid courses and examinations;

²¹⁰⁷ Matej Kejžar, Presentation at a roundtable on 112 in Antalya, 2013, www.eena.org/ressource/static/files/4.-kejzar.pdf; and Milan Dubravac, Presentation in Hungary, 2014, http://tuzoltoszovetseg.hu/data/files/november/FIRE_SERVICE_IN_SLOVENIA_Hungary_2014.pdf.

- *Organising and trains first-aid units;*
- *Carries out campaigns for recruiting blood donors and organising blood drives;*
- *Issuing cards to donors of parts of the human body;*
- *Carries out measures for protecting the health of persons during natural and other disasters and in the event of armed conflict;*
- *Carries out measures for the reception of evacuated and other endangered persons, measures which may contribute to the care afflicted persons.*²¹⁰⁸

“SRC is composed out of 56 Local Branches, covering one to three local municipalities with the network spread over 887 local organisation, that are run by committed volunteers. Under the Slovenian Red Cross Association there is also a Slovenian Red Cross Youth and Health Resort Debeli rtič, based on the Slovenian Coast.”²¹⁰⁹ The Slovenian Red Cross is comprised of 800,000 volunteers and supporting members. It has been a member of the international Red Cross Movement since 1993 and is a member of the International Committee of the Red Cross and the International Federation of Red Cross and Red Crescent Societies.

- “Caritas Slovenia”: “Caritas Slovenia” is a charity institution of the Roman Catholic Church in Slovenia. Its activities are distributed among diocese and parish Caritas organisations. Its purpose is to perform charity and social welfare activities within the Slovenian Church and society, particularly related to response to the results of natural and other disasters both in Slovenia and throughout the world. Caritas of Slovenia is a member of both the international and European Caritas organisations. The organisation has about 9,000 volunteers.²¹¹⁰
- Slovenian Mountain Rescue Service: The Law on security against natural and other accidents has established the Slovenian Mountain Rescue Service as a public rescue service of national importance. It is organised in 17 stations that cover the entire Slovenian Alpine and Sub-Alpine regions. More than 660 volunteer mountain rescuers operate the stations. The Slovenian Mountain Rescue Service was formally recognised by the International Mountain Rescue Commission (IKAR) in 1992, although the Slovenian Mountain Rescue Service has co-operated actively with this Commission and was the representative of all Yugoslav mountain rescuers from 1955 on.²¹¹¹
- Slovenian Cave Rescue Service: The Act on the Protection against Natural and other Disasters has established the Slovenian Cave Rescue Service as a public rescue service at the national level. It is organised into seven rescue centers - Ljubljana, Postojna, Sežana, Tolmin, Kranj, Velenje and Novo mesto where 55 cave rescuers serve on contract basis. The organisation is a member of the International Speleological Association – Cave Protection Commission (UIS) since 1993.²¹¹²
- The Slovenian Canine Association and the Slovenian Federation of Associations of Rescue Dog Handlers: In Slovenia, there are 62 sport and 18 hunting canine associations, with a total

²¹⁰⁸ Law on the Slovenian Red Cross, Article 9, [https://www.icrc.org/applic/ihl/ihl-nat.nsf/0/1e1be625c2973b89412565be0035800b/\\$FILE/Slovenian%20Red%20Cross%20Law_ENG.pdf](https://www.icrc.org/applic/ihl/ihl-nat.nsf/0/1e1be625c2973b89412565be0035800b/$FILE/Slovenian%20Red%20Cross%20Law_ENG.pdf).

²¹⁰⁹ Slovenian Red Cross brochure, www.rks.si/docs/About_Slovenian_Red_Cross/SRC_brief_general_3.pdf.

²¹¹⁰ Caritas Slovenia, <http://www.caritas.org/where-we-are/europe/slovenia/>.

²¹¹¹ Mountain Rescue Association of Slovenia, www.grzs.si/ftp/publikacije/Introduction%20of%20GRZS.pdf; Vladimir Prebilič and Uroš Svete, New Challenges and Possible Reorganization of Slovenian Mountain Rescue Service, http://www.mountaincartography.org/publications/papers/papers_bohinj_06/19_Prebilic_Svete.pdf.

²¹¹² Cave Rescue Service, <http://jamarska-zveza.si/index.php/foreigners/crs>.

of 7,500 members. These associations are linked to the Slovenian Canine Association and the Slovenian Federation of Associations of Rescue Dog Handlers. More than 150 rescue dog handlers, members of canine associations, are involved in rescues from rubble and landslides. The Slovenian Canine Association was accepted into the International Canine Federation (FCI) in 1992. The Slovenian Federation of Associations of Rescue Dog Handlers became a member of the International Rescue Dogs Organisation (IRO) in 1995.

- Slovenian Federation of Divers: There are 21 associations with 1,200 volunteer divers, of whom 62 are instructors and 27 specialist physicians. The associations and their federation have jointly organised an underwater rescue service, intended to provide rescue services from and on a water. More than 90 volunteer divers are involved in underwater rescue activities. The Slovenian Federation of Divers became a member of the World Underwater Association (CMAS) in 1993.
- Slovenian Scout Association and the Slovenian Catholic Girl Guides and Boy Scouts Association: Scouts are organised in branches and other organisational forms of camping and Scouting associations, and are linked to the Slovenian Scout Association and the Slovenian Association of Catholic Scouts. All together, they include 12,000 Scouts. Through their activities, scouts systematically develop their level of preparedness to help people in the event of natural and other disasters. Their primary task is to set up tents and other temporary shelters for people who are left without safe accommodation in the event of a disaster. Slovenian Scout Association was accepted into the World Organisation of Scouting Movements (WOSM) in 1994.²¹¹³
- Association of Slovenia Radio-Amateurs: In Slovenia, there are 90 amateur radio-operator clubs with a membership of more than 7,000 volunteer amateur radio operators. Amateur radio operators can provide supplementary radio communications systems in municipalities for protection and rescue needs in the event of a mass disaster. They can also participate in providing information to the international public of the consequences of the disaster and the aid needed. The Association of Slovenian Radio-Amateurs became a member of the International Amateur Radio Union (IARU) in 1992.²¹¹⁴

5.2 Materiel (non-financial) resources

Material resources for civil protection and disaster relief are provided under the Decree on Minimum Personal and Collective Protection Resources and Equipment in the Event of Natural and Other Disasters and War of 1992. Head manager of the material reserves is the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief. In the last decade, the Administration systematically enhanced the national commodity reserves, which according to the Law on Protection Against Natural and Other Disasters, are provided through the Institute for Commodity Reserves. Those resources are stored in the National Logistics Centre in Roje in Ljubljana and in the warehouse of commodity reserves in Zalog. In the National Logistics Center in Roje the following equipment has been accumulated as state commodity reserve: readers, dosimeters, special suits, safety masks, safety, respira-

²¹¹³ Slovenian Scout Association, available only in Slovenian language at <http://www.taborniki.si/>; and Slovenian Catholic Girl Guides and Boy Scouts Association, <http://skavti.si/en>.

²¹¹⁴ 2005 Hyogo report.

tors, gloves, special protective boots, water containers, decontamination means and equipment, etc.²¹¹⁵

According to the Law on Protection Against Natural and Other Disasters available defence resources might be used to carry out the necessary rescue and relief operations if the civilian resources are insufficient and the military are not indispensable for defence operations (Art. 14). Article 85 of the Law regulates the special powers, mandated to the Civil Protection commanders in cases of emergencies. It states (between others) that in the course of protection, rescue and relief the Civil Protection commander or incident commander shall have the right to order that:

- “... private means of transport be made available and used for the transportation of injured persons or required means of protection, rescue and relief;”
- “private premises be used for the purposes of protection, rescue and relief;”
- “premises be used as a temporary storage site for debris, soil and other material produced during the performance of protection, rescue and relief duties aimed at provision of basic living conditions;”
- “buildings be demolished or trees be cut.”

Such measures “...may only be ordered, where no other measures can ensure the protection of people and property and the performance of protection, rescue and relief, and shall apply no longer than absolutely necessary.”

The responsibility of the Civil Protection commander for using private and corporate assets is regulated by paragraph 5 of the same Article in the following way:

Normally, records shall be kept of decisions made by a Civil Protection commander or incident commander. For decisions with bigger financial implications, written orders shall be issued. Circumstances permitting, the written order shall be issued as soon as possible. In urgent cases Civil Protection commander or incident commander shall have the right to order owners or users of residential and other accommodation facilities that they provide temporary shelter and care for threatened persons until a decision has been made by the Mayor.

5.3 Training

Education and training on behaviour in cases of different emergencies is a national priority as a core component of disaster preparedness and nation’s resilience. It well regulated by the Law on Protection Against Natural and Other Disasters where a special Chapter (XIII) with six articles is dedicated to education and training. The elements of organising education and training are presented in Table 10.

According to the web site of the Administration for Civil Protection and Disaster Relief, the main training institution is the Centre for Civil Protection and Disaster Relief of the Republic of Slovenia. “The Training Centre is responsible for the development and evaluation of training programmes and prepares training materials”²¹¹⁶ for Civil Protection members, members of units, services and other operational systems of associations and other non-governmental organizations, commercial companies, institutions and other organisations. It also organises training forms within international organisations, mostly NATO, EU, UN and in a regional format. “It provides professional publishing support

²¹¹⁵ Odlok o Minimumu Sredstev in Opreme za Osebnost in Skupinsko Zascito ob naravnih in Drugih Nesrecah ter in Vojni (Uradni List RS No 32/92) (Decree on Minimum Personal and Collective Protection Resources and Equipment in the Event of Natural and Other Disasters and War). Available in Slovenian language at <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ODLO483>.

²¹¹⁶ Source: <http://www.sos112.si/eng/page.php?src=iz1.htm>.

for the “Ujma” national magazine, which addresses issues of disaster management.”²¹¹⁷ The Training Centre has a legal mandate to engage in testing of protection and rescue equipment.

Table 33. Education and training on protection against natural and other disasters.²¹¹⁸

Education (As part of the educational process)		Training	
Elementary schools	Basic knowledge about natural and other disasters and protection against them.	Training of the citizens for personal and mutual protection	<p>Training and preparation on personal and mutual protection and implementation of the required protective measures is a legal duty of citizens;</p> <p>Training of residents on personal and mutual protection and on implementation of the required protection measures is conducted as an optional form of training, particularly through educational radio and television broadcasts, news and educational materials received at home, public presentation of plans for protection and rescue, and monitoring of practical exercises.</p> <p>This training is organised by the competent national authorities and municipalities in accordance with the threat of the environment.</p>
Secondary and university education	Knowledge on protection against natural and other disasters in accordance with educational objectives and learning content of the programmes.	Training of volunteers in rescue services	<p>- Training of volunteers in the fire brigade, mountain rescue service, cave rescue service, underwater rescue and other services is organized and conducted by voluntary organizations that organize this services.</p> <p>This training is conducted with accordance to the programs, prescribed by the Minister of defence.</p>
		Training of Civil Protection (CP) units	<p>- Training of the CP comprises introductory, basic and advanced training. Introductory and basic training should not exceed 15 days, while advanced must not last more than five days (usually in non-working days).</p> <p>- Advanced training is done through practice as well as examination of the participants’ skills.</p> <p>- Training is conducted in accordance to the programs, prescribed by the Minister of defence.</p>

²¹¹⁷ Ibid.

²¹¹⁸ Based on the Law on Protection Against Natural and Other Disasters, EC Vademecum, Olga Andrejek, Presentation, <http://www.zagreb.hr/UserDocsImages/Sistem%20VNDN%20olga%20zagreb1.ppt>; and Slovenian National progress report on the implementation of the Hyogo Framework for Action (2013-2015).



Figure 45. Pictures from training polygons at the Centre for Civil Protection and Disaster Relief of the Republic of Slovenia.²¹¹⁹

5.4 Procurement

5.4.1 Procurement regulation

Slovenia's public procurement policy has been progressively harmonised with both EU directives and World Trade Organisation Government Agreement (GPA) since 2000. Recently, public procurement in Slovenia is regulated by the following legislation:

- The Public Procurement Act which lays down the procedures for the procurement of goods, services and works, which must be obeyed by public procurement authorities and providers, who submit a bid.
- The Public Procurement in the Water, Energy, Transport and Postal Services Sector Act covering procedures for public purchasing in the water, energy, transport and postal services sector, and
- The Review of the Public Procurement Procedures Act which lays down the laws and other regulations relating to procedures concerning the award of public contracts and the means of implementing EU legislation.

Applied to all state institutions and local administration, public undertaking and utilities, including those related to protection against natural and other disasters, "... the Public Procurement Act has increased protection for bidders, unified all procedural requirements and eliminated the 10% preference for domestic bidders. The Act established an independent body, the National Review Commission (NRC) whose members are appointed by Parliament to ensure their independence."²¹²⁰

²¹¹⁹ Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, www.sos112.si/eng/page.php?src=iz1.htm.

²¹²⁰ OECD, 2009.

According to the Law on Protection Against Natural and Other Disasters (Art. 102) for the aims of providing protection, rescue and relief the Administration for Civil Protection and Disaster Relief has the right to provide the affected population with relief resources, specific protection and rescue equipment and tools free of charge. It also permitted by that Law, selected protection and rescue equipment and tools to be reassigned free of charge to units, services and operational structures. However, for any free of charge delivery the Government or the Minister of Defence and other ministers should take a decision.

5.4.2 Procurement procedures

The legislation on public procurement in Slovenia provides several options for the contracting authorities to open up a public procurement using one of the following procedures:

- Open procedure;
- Procedure with prior verification of eligibility (qualitative selection);
- Competitive dialogue;
- Negotiated procedure without publication of a contract notice;
- Negotiated procedure with prior publication of a contract notice;
- Procedure for collecting bids after prior call for competition;
- Procedure for collecting bids.

According to the legislation, any contracting authority must send notification of an intended procurement to the Office of the Official Publications of the European Communities, which will publish it, and to the Public Procurement Portal, if a procurement without VAT amounts to the following values:

- EUR 133,000 for procurement in goods and services, if the contracting authorities are State authorities or local councils,
- EUR 206,000 if goods and services are purchased by another contracting authority,
- EUR 5,150,000 for public procurement in construction works.
- For public procurement in the water, energy, transport and postal services sector the threshold amount for goods and services is EUR 412,000 and for construction works EUR 5,150,000.

However, the thresholds are different for each procedure, and for each type of public procurement, in particularly in the field of defence. Detailed provisions are laid down in the Public Procurement Act and in the Decision on the publication of thresholds for public procurement procedures.

This Act also created a single central administration for public procurement – Public Procurement Office. It is in charge for implementation of all kind of procurement procedures, provides analyses of the procurement situation in the country and abroad and co-operates with EU, WTO and other international governmental organisations as well as with the NRC.

Slovenia has a completely developed and fully operational single information portal on public procurement managed by the Ministry of Finance. The state and local authorities are obliged by the Law to publish on that portal all public tenders- related information. The portal provides standardised web application and variety of administrative elements in electronic format as receipt-and-delivery system application, e-payments, e-serving, e-signature, e-awarding of contracts and e-auction. Ac-

According to web-based information,²¹²¹ on the procurement portal have to be published announcements for:

- Procurement of goods and services by Public Procurement Act subject, with a value equal to or greater than EUR 20,000;
- Works contracts awarded by Public Procurement Act subject, with a value equal to or greater than € 40,000;
- Procurement of goods and services by Public Procurement in the Water, Energy, Transport and Postal Services Sector Act subjects, whose value is equal to or greater than € 40,000;
- Works contracts awarded by Public Procurement in the Water, Energy, Transport and Postal Services Sector Act subjects, whose value is equal to or greater than € 80,000.

Announcements should include:

- Prior information notice or periodic indicative notice
- Contract notice small value,
- Contract award notice small value,
- Notice of contract by tendering procedure with prior publication,
- Notice of award of the contract by tendering procedure with prior publication,
- Contract notice,
- Contract award notice,
- Notice of competition,
- Results of the competition,
- Voluntary ex-ante transparency notice,
- Simplified contract notice on a dynamic purchasing system
- Notice of the system of qualification
- Notice of award of individual contracts based on framework agreement
- Notice for additional information, information on incomplete procedure or corrigendum.

In terms of exception from the general public procurement regulations, the Law on Protection Against Natural and Other Disasters (Art. 85, paragraphs 4 - 6) provides a Civil Protection commander or incident commander with the right to order urgent construction, technical and other works to commercial companies, institutions or other organisations with which the national or local authority has signed a contract on the performance of specific operational protection and rescue duties. In the absence of such entities, a Civil Protection commander or incident commander might order that private or legal subjects, who have adequate equipment or capabilities, perform these duties. The order shall be written, or if the circumstances do not allow, in exceptional circumstances, oral. In this case, a written order shall be issued as soon as possible. The order shall determine the type and scope of work that needs to be done. For decisions with bigger financial implications, written orders shall be issued.

5.5 Niche capabilities

The Slovenian civil protection system has specifics that make it different from the European experience, but they reflect the country's realities and traditions. There are several principal areas of excellence that may be used within EU context and format:

²¹²¹ Available in Slovenian language only at <http://www.enarocanje.si/?podrocje=portal>.

- Slovenia has a well-established disaster management planning process for the nine separate hazards, based on scenarios. Especially advanced is the emergency response plan covering disasters.²¹²²
- Public engagement on a regular basis in the disaster preparedness and response is a national tradition and value. Legal acts, guides and instructions support the specific focus on both individual capacities and collective assistance.
- Education and training on behaviour in an emergency is life long and well managed. The European Emergency Number association has acknowledged the training in Slovenia on the use of 112.
- The communication and information sharing and the alerting systems are at the highest European level of quality.
- Slovenia has well established and maintained capacity for mountain and cave rescue operations.

²¹²² UNISDIR, 2008.

Resources

Legislative acts

Act amending the Act on the Protection against Natural and other Disasters. Official Gazette of the Republic of Slovenia No 28/06.

Act on the Protection against Natural and other Disasters. Official Gazette of the Republic of Slovenia No 64/94. Available at <http://www.sos112.si/db/priloga/p4360.pdf>.

Constitution. Official Gazette of the Republic of Slovenia Nos. 33/91-I, 42/97, 66/2000, 24/03, 69/04, 68/06, and 47/13. Available at <http://www.us-rs.si/media/constitution.pdf>.

Environment Protection Act. Official Gazette of the Republic of Slovenia No 41/04.

Fire Protection Act (official consolidated text). Available at www.sos112.si/db/priloga/p4361.pdf.

Material Obligation Act. Official Gazette of the Republic of Slovenia No 87/01, 08. 11. 2001, Spatial Planning Act (Zpnačrt), www.uradni-list.si/1/objava.jsp?urlid=200733&stevilka=1761.

Public Administration Act. Official Gazette of the Republic of Slovenia No 52/02.

Public Procurement Act (ZJN-2). Available at <http://www.dkom.si/mma/-/2007100210195957/>.

Removal of Consequences of Natural Disasters Act. Available at <http://www.uradni-list.si/1/objava.jsp?urlid=200375&stevilka=3620>.

Other normative acts

Decree on Fire Insurance Tax. Official Gazette of the Republic of Slovenia No 34/06.

Decree on Minimum Personal and Collective Protection Resources and Equipment in the Event of Natural and Other Disasters and War. Official Gazette of the Republic of Slovenia No 32/92.

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

SPAIN

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ATOS (Diego Alexander Chanto García, Alejandro Afonso Spinola, Darío Ruíz)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

A new law on Civil Protection, Law 17/2015 of 9 July of Civil Protection, has entered into force in Spain on 10 January 2016. This law aims to strengthen the operating methods that improve the functionality of the national system of civil protection, coordinated by the General Directorate of Civil Protection, in emergency or catastrophe cases set by the Law 2/1985, of 21 January of Civil Protection.

New means of effective intervention, such as the Military Emergency Unit (EMU), have also been created. On the other hand, the autonomous communities and also the local entities have deployed their own operating methods in terms of Civil Protection.

This Spanish system of civil protection is understood as a public safety instrument, integrated into the National Security policy.

The law 17/2015 defines the civil protection as a public service and establishes the operating methods of the General Directorate of Civil Protection and Emergencies (GDCPE). The Law 2/1985 described a series of steps in case of catastrophe or emergency, such as prevision, prevention, planning, intervention and recovery; law 17/2015 complements the previous law by adding general coordination of the political actions through the definition and monitoring of strategies in terms of civil protection. This law regulates a minimum set of rights and duties of citizens in the field of civil protection as well as principles for action by public authorities. Law 17/2015 also includes the training of the human resources of the General Directorate of Civil Protection.

In Spain, the General Directorate of Civil Protection is responsible of the civil protection actions in all the public administrations in terms of improving and guaranteeing an efficient and coordinated response in case of a severe risk, catastrophe or public calamity through the following operation methods:

- To foresee collective risks using a series of actions dedicated to anticipate them and avoid them; and in some cases reduce damages that this type of risks may produce;
- To plan the necessary method to fight a risk situation;
- To carry out the operative intervention that allows an immediate response in an emergency case;
- To adopt the recovery methods to establish the infrastructures and all the essential services;
- To coordinate, trace and evaluate the system to guarantee and effective operation.²¹²³

On the other hand, according to article 19 of Royal Decree 872/2014, of 10 October, which establishes the basic organisation of the forced army, the Emergency Military Unit (UME) is a special branch of the forced army and which main missions are to act anywhere in the national territory to protect people in any situation of disaster, serious risk or catastrophe. The Minister of Defence will dictate the rules to operate in this type of situations.

²¹²³ Article 3 of the law 17/2015 of Civil Protection. Accessed February 8, 2016.

National crisis management & disaster response concept:

National crisis management could be describe as a set of political and administrative decisions and also as a set of operative interventions carried out in the different steps of a National crisis or a disaster not only acting but also anticipating to that situation. Those steps are: disaster prevention, disaster preparedness, relief, rehabilitation and reconstruction.

According to article 1 of the Current Spanish Law on Civil Protection:

*Civil Protection is a public service that focuses on the study and prevention of serious collective risks, extraordinary catastrophes or public calamity situations which can massively endanger the life and safety of people, their goods and the environment in cases where these situations occur*²¹²⁴.

Paying attention to this definition, the actions of Civil Protection are not only limited to take part in simple and ordinary accidents but also take part in serious collective risks, extraordinary catastrophes or public calamity situations.

The article 30.4 of the Spanish Constitution establishes

*Citizen duties may be regulated in serious risks, catastrophe or public calamity cases*²¹²⁵.

As a consequence of this article, the main participants of Spanish Civil Protection System are:

- All the Public Administration such as local, autonomic and state administration and all the public organism and private entities.
- All citizens by fulfilling of their duties imposes by article 4 of civil protection law that establishes:

*All citizens will be subject to the obligation to cooperate personally and materially in civil protection actions in case of requirement by the competent authorities, after they are of legal age*²¹²⁶.

Volunteers, security, protection and fighting fire services and media are considered the main participants that have to cooperate in emergency situations.

The National Civil Emergency Planning Committee (NCEPC), an interministerial support function to the Crisis Cabinet, is mainly concerned with tasks related to the provision and implementation of resources in situations of crisis or emergency.

The NCEPC has a coordinating role in the Spanish Civil Protection and sits at the top of Civil Defence's organisational structure. It can meet either in plenary or permanent sessions. The Committee is composed of the Crisis Cabinet Secretary (President), the Director General for Defence Policy (First Vice President), the Director General for Civil Protection and Emergencies (Second Vice President) and the Under Director for Civil Preparedness (Secretary). Some of the other members are the Director of the Crisis Staff Department and the Committee President's Advisor on Defence and Security.

²¹²⁴ Article 1 of the current Spanish law on Civil Protection. Accessed January 28, 2016. <https://www.boe.es/boe/dias/2015/07/10/pdfs/BOE-A-2015-7730.pdf/>

²¹²⁵ Article 30.4 of the current Spanish Constitution. Accessed January 28, 2016. <https://www.boe.es/buscar/pdf/1978/BOE-A-1978-31229-consolidado.pdf/>

²¹²⁶ Article 4.4 of Law 2/1985 of 21 January. Accessed January 28, 2016. <https://www.boe.es/boe/dias/1985/01/25/pdfs/A02092-02095.pdf/>

Spain has bilateral agreements with Italy, France, Germany, Israel, Mali, Morocco, Portugal, Russia, and Senegal in terms of civil protection.

Key stakeholders: The main stakeholders in Spain are the Senior Civil Emergency Planning Committee (SCEPC), the National Civil Emergency Planning Committee (NCEPC), the Emergency Military Unit (EMU) and Civil Protection Agents (e.g. fire brigades, security forces, armed forces, maritime and aeronautical authorities, health services, etc.).

Niche crisis management capabilities of interest to the EU and other MSs:

The European Centre of Social Research of Emergency Situations (CEISE²¹²⁷) is a dependency of the General Directorate of Civil Protection that according to Royal Decree 991/2006 of 8 September has as a mission the development of researches and studies about sociologic, juridical and economic aspects. These areas of research are relevant to Civil Protection.

The CEISE fully maintains the functions previously performed by the European Research Centre for Information Technology to the population in Emergencies situations.

On the other hand the Spanish Society of Radiological Protection (SSRP) is a scientific association which main function is the scientific promotion and dissemination of radiological protection.

²¹²⁷ CEISE. Accessed January 28, 2016. <http://www.proteccioncivil.es/web/dgpcye/ceise/>

Table of Contents

SPAIN Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1508
Overview	1509
Table of Contents	1512
List of Figures	1513
List of Tables.....	1513
List of Abbreviations.....	1514
1 Policy	1515
1.1 Risk Assessment.....	1515
1.2 Policy and Governance	1517
1.2.1 Strategy scope and focus	1517
1.2.2 Monitoring and analytical support to policy making; R&D	1518
1.2.3 Policy for Prevention	1519
1.2.4 Policy for Preparedness	1521
1.2.5 Policy for Response	1521
1.2.6 Policy for Relief and Recovery	1522
2 Legislation	1524
2.1 Crisis (emergency, disaster) management concept.....	1524
2.2 General crisis (emergency, disaster) management law.....	1524
2.3 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1526
2.4 Legal regulations on the involvement of volunteers and specialised NGOs	1527
3 Organisation.....	1528
3.1 Organisational chart.....	1528
3.2 Organisational cooperation	1531
4 Procedures	1533
4.1 Standing Operating Procedures (SOPs) and Guidelines.....	1533
4.2 Operations planning	1533
4.3 Logistics support in crises	1535
4.4 Crisis communication to general public; Alert system; Public Information and Warnings	1536
5 Capabilities.....	1537
5.1 Human resources	1537

5.2 Materiel (non-financial) resources	1537
5.3 Training	1537
5.4 Niche capabilities	1538
Resources	1540
Online resources	1540

List of Figures

<i>Figure 1: Disaster relief structure in Spain</i>	<i>1523</i>
<i>Figure 2: Organisational Chart of the Emergency Management Agency of Madrid, Spain</i>	<i>1530</i>
<i>Figure 3: Operational structure of the EMU</i>	<i>1532</i>

List of Tables

<i>Table 1: Major disasters in Spain in the last 30 years</i>	<i>1516</i>
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List of Abbreviations

Abbreviation / acronym	Description
ACCP	Autonomic Commission of Civil Protection
CECIS	Common Emergency Communication and Information System
CEISE	European Centre of Social Research of Emergency Situations
CEPC	Civil Emergency Planning Committee
EADRCC	Euro Atlantic Disaster Response Coordination Centre
ECURIE	European Community Urgent Radiological Information Exchange System
EMU	Emergency Military Unit
ENAC	Emergency Notification and Assistance Convention
ERCC	Emergency Response Coordination Centre
ERN	Emergency Radio Network
ESG	Emergency Support Group
GDCPE	General Directorate of Civil Protection and Emergencies
IANIS	Industrial Accident Notification System
ISEM	Information System of Emergencies Management
MIC	Monitoring and Information Centre
MS	Member States
NCCP	National Commission for Civil Protection
NCEPC	National Civil Emergency Planning Committee
NHE	National Hall of Emergencies
NIT	National Institute of Toxicology
NSCPS	National System of Civil Protection Strategy
NSS	National Security Strategy
RAR	Radioactivity Alert Network
SCEPC	Senior Civil Emergency Planning Committee
ACCP	Autonomic Commission of Civil Protection
CECIS	Common Emergency Communication and Information System

1 Policy

1.1 Risk Assessment

A risk may be defined as the probability that a determinate natural or technological phenomenon takes place and due to the vulnerability of any exposed element may produce harmful effects on people or their goods.

Risks use to be divided in:

- Natural risks that can be defined as a series of natural phenomena that can be potentially dangerous. This groups is composed by floods, forestall fires, avalanches, tsunamis, earthquakes, droughts and volcanos;
- Technological risks. This type of risks are the result of the use of new technologies such as nuclear, radiologic, chemical risks and risks related to the transport of dangerous goods.

In Spain, there are three different climatologic zones (the first one of them is marked by the Atlantic influence, the second one has a Mediterranean influence and the last one has a continental influence, apart from the specific singularity of the Canary Island). This is the result of the meteorological conditions that predominate in the general atmosphere in Spain.

The different meteorological phenomena that may occur in Spain and produce a risk situation are: high temperatures, heavy rains, intense cold, storms, wind and snow.

A forest fire can be defined as the fire that spreads with no control through a forest land that was not intended to burn.

Sunlight but mainly the use of forest zones as a workplace (agriculture, forestall works) and also as entertainment places are the principal causes of fire. If fire is not fought on time, it can generate large losses in the environment, in material goods and even people.

Geological accidents are represented by avalanches, earthquakes and volcanos; and hydrological accidents are mainly represented by floods.

In the technological side, the production of electricity in nuclear power plants is authorized in most industrialized countries because it brings profits to society activity, however it should be done under strict requirements of nuclear safety and radiation protection, throughout the life of the nuclear power plant, since it is first open until it is finally closed.

There are many objects, materials and products that people use every day and help to improve their life style, providing services and facilities. All this is possible due to the improvements in technology.

However, industrial processes that require the use of a series of substances and dangerous conditions are needed to produce these objects, products and materials that make people lives easier.

These activities, even if they are very simple, carry certain risks. The quantification of those risks depends on the probability that an accident appears and how much damage it is capable of generate.

The most important disasters in Spain in the last 30 years are:

Year	Disasters
2016	Earthquakes in Melilla
2015	Forest fire in Asturias
2015	Military helicopter crashes in Atlantic, Gran Canaria, 3 dead
2015	Violent hailstone storm in Albacete
2015	Oil slick, Gran Canaria
2015	Greek fighter jet crashes, Albacete, 10 dead
2014	Nurse infected with Ebola, 2 dead
2013	Train accident, Santiago, Galicia, 79 dead, 140 injured people
2012	Floods, Malaga, Almeria, Murcia, 10 dead
2011	Earthquakes, Lorca, Murcia Region, 9 dead
2011	Volcanic eruptions, El Hierro, Canary Island
2009	Storm, 14 dead
2009	Wildfire, 6 dead
2008	Fatal aerial crash, 153 dead
2007	Forest fire, Gran Canaria, Canary Island
2006	Extreme temperature, 21 dead
2005, 2005	Forest fires.
2004	Extreme temperature, 26 dead
2003	Extreme temperature
2003	Wildfire, 5 dead
2002, 2001, 2000	Floods in the Spanish East Coast
2001	Storm, 10 dead
1996	Mass movement wet, 84 dead
1985	Tanker explosion in Algeciras, 32 dead

Table 34: Major disasters in Spain in the last 30 years

1.2 Policy and Governance

The National Security Strategy document states that

Security is an essential fundament to reach the development and the progress of a free society.

...

*To the traditional risks and threats are added new transnational nature risks, which are interconnected and enhance their dangerousness.*²¹²⁸

The National Security is defined as a public service that needs the cooperation of the society as a common organisation. Under the direction and leadership of the Prime Minister, the national security is responsibility of the Government and involves all the Public Administrations.

As one of the principal organisms responsible of the civil protection actions in all the public administrations in terms of improving and guaranteeing an efficient and coordinated response in case of a severe risk, catastrophe or public calamity, the civil protection structure coincides with the administrative structure. The civil protection has the following structure:

- The National Civil Emergency Planning Committee (NCEPC) that has the following functions:
 - Issuing of planning directives for different emergency plans, related to objectives, alternatives, and determination of time limits in order to plan for the different hypothetical crisis situations;
 - Coordination of the different plans for resource contribution formulated by the Sectorial Committees;
 - Representation of Spain in NATO's Senior Civil Emergency Planning Committee (SCEPC) and participation in their work.
- The Civil Protection structure at the state level starts at the Directorate General of Civil Protection and Emergencies, under the Minister of the Interior. The representation of this structure in the Autonomous Communities is the responsibility of the delegations and sub-delegations of the Government. Each of them has a Civil Protection Unit.

Most competences in civil protection (except for nuclear issues) are transferred to the autonomous communities and municipalities, which have their own structure for the protection of citizens and goods. The communities and municipalities are responsible for integrated civil protection planning including risk assessment plans and for operational units.

1.2.1 Strategy scope and focus

According to article 4 of Law 17/2015, of 9 July, of the Civil Protection,

- *The National System of Civil Protection Strategy (NSCPS) consists in analyse every risk that may affect people or goods protected by the civil protection system, and also formulate all the strategic lines of actions to align, integrate and prioritize efforts to optimize the resources available to mitigate the effects of emergencies.*

²¹²⁸ National Security Strategy document. Accessed January 29, 2016
http://www.lamoncloa.gob.es/documents/seguridad_1406connavegacionfinalaccesiblebpdf/

- *The NSPCS integrates and aligns all the ways of action that the General Administration of the State uses in terms of civil protection. All these ways of action are approved by the National Security Council, after the Prime Minister proposes them.*

The main tasks of Civil Protection are:

- **Anticipation:** Anticipation determinates the risks in a territory based in the conditions of vulnerability and the possible threats and comprises analysis and studies that allow obtaining information and predictions about dangerous situations.
- **Prevention:** Prevention comprises all the methods and actions used to avoid or mitigate the impact of risks and threats in the different emergency situations.
- **Planning:** Civil Protection plans are the main instruments of prevention and mechanisms that allow mobilizing all the human resources and materials needed to protect people and goods in emergency cases.
- **Immediate response:** It involves all the public and private services that must intervene in an emergency case as fast as possible to reduce damages, rescue and protect people and goods.
- **Recovery:** This is the set of actions and operating methods used by public and private entities and that are aimed to establish normality in any catastrophic zone.
- **Evaluation and control**

In other words, the civil protection activities mainly concern the provision or mobilisation of civil resources and services that are needed to respond to an emergency in any autonomous community.

There are two main areas of support: protection of the population and protection of specific resource sectors.

The plans aimed for civil protection are approved at the different levels: the state, the autonomous communities and the local authorities. The role of the national civil protection authority is to verify that all the plans are carried out and are also updated.

1.2.2 Monitoring and analytical support to policy making; R&D

According to the article 167C of the Lisbon Treatment of 17 December, 2007 all the Member States (MS) must cooperate in any emergency case that involves any country that belongs to the MS. The European Union has to mobilize all the available instruments even military services to help any country of the MS.

The main role of the Community Mechanism for Civil Protection is to facilitate the cooperation in civil protection assistance interventions in the event of major emergencies which may require urgent response actions.

The operational heart of the Mechanism is the Emergency Response Coordination Centre (ERCC). The ERCC operates within the European Commission's Humanitarian Aid and Civil Protection department (ECHO) and it was set up to support a coordinated and quicker response to disasters both inside and outside Europe using resources from the countries participating in the European Union Civil Protection Mechanism. The ERCC replaces and upgrades the functions of the previous Monitoring and Information Centre (MIC).

The ERCC has the capacity to deal with a series of several and simultaneous emergencies in different time zones. One of the main missions of the ERCC is provide a response during emergencies helping to cut unnecessary and expensive duplication of efforts.

It collects and analyses real-time information on disasters, monitors hazards, prepares plans for the deployment of experts, teams and equipment, and works with Member States (MS) to map available assets and coordinate the EU's disaster response efforts by matching offers of assistance to the needs of the disaster-stricken country.

The ERCC also supports a wide range of prevention and preparedness activities, from awareness-raising to field exercises simulating emergency response.

The Mechanism also works towards enhanced preparedness. It is supported by a database with information on the national civil protection capabilities available for assistance interventions.

Experts and team leaders included in the civil protection database are invited to participate in a training programme with courses, exercises and an exchange of experts system.

The Common Emergency Communication and Information System (CECIS) is a web-based alert and notification application. It provides an integrated platform to send and receive alerts and notifications, details of assistance required, to make offers of help and to view the development of the ongoing emergency as they happen in an online logbook.

Its main task is to host a database on potentially available assets for assistance, to handle requests for assistance on the basis of these data, to exchange information and to document all action and message traffic.

To achieve its objective of emergency management, CECIS essentially provides a communication platform for e-mail like message exchange. Specific functionality is available for matching requests with offers, and for managing resources (experts, teams, modules, individual resources).

Apart from CECIS, there are other systems used for monitoring natural risks such as:

- European Community Urgent Radiological Information Exchange System (ECURIE) (Radiological/Nuclear)
- Rapid Alert System used for exchanging information on health threats due to deliberate release of chemical, biological and radio-nuclear agents (RAS BICHAT)
- Industrial Accident Notification System (IANS) (UNECE- Industrial accidents)
- Emergency Notification and Assistance Convention (ENAC) (Atomic Energy).

1.2.3 Policy for Prevention

- State level
- Autonomic level
- Local level

At the State level, the Government plays a relevant role in Civil Protection activities. The Minister of Interior performs the management of the civil protection in every autonomic or provincial territory.

For the coordinated adoption of the specific policies in the matter of civil protection, the National Civil Protection System counts on the National Civil Protection Commission and represents the three administrations (Central, Autonomic and Local).

The Decree 1125/1976:

- Establishes civil-military cooperation rules during emergencies
- Settles procedures of request for the cooperation of the Armed Forces
- Specifies that the Military Authorities are to be informed of and participate in the emergency plans produced by the Civil Authorities (at state, regional and local levels) and that they shall have prepared response plans.

The Organic Act 1/1980 on National Defence:

- Stipulates that the Government shall arrange the contribution of whatever kind of resource that is necessary (human, material, etc., public or private)
- Defines the Civil Defence concept (Civil Preparedness), i.e. the standing availability of all human, material and non-military resources in order to manage major disasters
- Establishes that the Armed Forces will cooperate at the request of civil authorities.

At the Autonomic level, the autonomous communities must lead and manage the emergencies of civil protection that take places in their territories and also develop the Emergency Plans of Civil Protection (EPCP).

In the autonomous communities exists an Autonomic Commission of Civil Protection (ACCP) in which all the public Administrations are represented. The ACCP is formed by representatives of the State Administration, the autonomous communities and local corporations.

At the Local level, there is a Territorial Plan depending on every autonomous community. In any case, the local authorities should develop and approve their own Civil Protection Plans that must be approved by the relevant Regional Commission for Civil Protection.

In general all the forces of intervention that could be involved in a major emergency are:

- Civil protection organisms of the Public Administrations;
- Forces of State Security;
- Emergencies Military Unit;
- Firefighting and rescue bodies;
- Local and Regional Police;
- Emergency health response bodies;
- Private organizations and other groups that help in tasks of logistical support;
- Civil Protection volunteers;
- Citizens;
- Support of the countries of the European Union.

In terms of prevention, planning and operation, the General Branch for Plans, Operations and Emergencies has some functions: Realize studies and analysis of risks; prepare state plans for civil protection; prepare guidelines which main goal is the prevision, prevention and planning of civil protection and emergencies; prepare and disseminate warnings to the civil protection organisations.

1.2.4 Policy for Preparedness

According to the Royall Decree 1181/2008, of 11 July, the General Directorate of Civil Protection and Emergencies (GDCPE) has a series of functions:

- Preparing state plans for civil protection or guidelines approved by the current legislation;
- Preparing accident drills;
- To study and analyse risks to develop emergency and catastrophe prevention plans.
- To prepare and disseminate warnings to civil protection organisations and, when necessary, to citizens;
- To process grants and aids to facilitate the implementation of the civil protection plans at the state level;
- Theoretical and practical training in risk and emergency management, including the training of officers and personnel of the different services and organizations involved in emergency actions, in particular services of firefighting and rescue, health services and security forces;
- Organise and maintain a specialised documentary that allows the maximum dissemination of the information;
- Development of studies and information programs;
- Request assistance from the Emergency Military Unit under the action protocols established for it.

To develop all these functions the GDCPE is structured in three levels:

- The General Branch of Planning, Operations and Emergencies;
- The General Branch of Resources and Grants management;
- The Division of Training and Institutional Relations.

1.2.5 Policy for Response

There are technological and natural risks. Depending on the type of the risk, different actions must be taken.

Technological risks are formed by chemical risks, nuclear risks and risks transporting dangerous products.

- Actions related with chemical risks. The main activities realize in this field are based on:
 - Prepare State Plans for Civil Protection in terms of chemical risks, organising support techniques to civil protection plans;
 - Prepare technique documentation related with risk analysis and communication, methodologies to analyse environmental risks and also develop technical inspections;
 - Develop technologic risks research projects.
- Actions related with transport of dangerous products accidents. The main activities realize in this field are:
 - Prepare State Plans for Civil Protection in terms of transport of dangerous products.

- Provide technical advice to emergency response services and the management bodies through the National Institute of Toxicology (NIT).
- Preparation of technical documents that are made continuously and are published periodically.
- Develop national statistics on accidents in the transport of dangerous products by road and rail.
- Actions related with nuclear risks. The main activities realized in this field are:
 - Planning;
 - Communication to citizens;
 - Training.

In the other hand, Government implements a series of actions to fight natural risks. Parallel to actions of prevention and planning, campaigns to fight natural disasters are developed.

Every year, Directorate General of Civil Protection and Emergencies under the orders of the Directorate of Plans and Operations prepares and coordinates exercise programmes. This is done independently or with the support of the National Civil Protection School. Exercise planning is based on risk analysis and prevention. The principal areas of action are:

- Forest fires;
- Winter road campaign;
- National Surveillance Plan of adverse weather.

1.2.6 Policy for Relief and Recovery

Through the task of rehabilitation, actions aimed at restoration of essential public services and environmental and socioeconomic conditions necessary for the return to normality of the affected populations are made.

According to article 20 of law 17/2015, of 9 July,

- *Rehabilitation methods have to be applied in aid operations to restore normality in the affected areas.*

The rehabilitation begins as soon as emergency ends, and its main function is providing economic and financial support to develop construction operations or food supply actions to alleviate damages caused by the disaster in those areas catalogued as catastrophic zones by the Government.

The process of rehabilitation is a fully Government and Civil protection obligation.

In all the phases of a catastrophe cycle, reconstruction is probably the longest, most expensive and complex action.

Reconstruction may be defined as an opportunity to realize the long term changes to reduce vulnerabilities in terms of urbanism and infrastructure, for example, and also to improve the social, economic and cultural capacities.

This phase needs that local, regional and national authorities work together depending on the extent of the damages.

In Spain, the General Directorate of Civil Protection and Emergencies (GDCPE) also has the mission of rehabilitation in a situation of emergency after a natural or technological disaster. The GDCPE has to assist the competent institutional bodies in the planning and implementation of

measures for the restoration of the essential public services and also the economic and environmental conditions necessary to normalize life conditions in the affected areas.

The State Plan for Civil Protection incorporates the Emergency Military Unit (EMU) in its organisational provisions and also the emergencies intervention situations, all this according to the Royal Decree 1097/2011 of 22 July by which the protocol of the EMU intervention is approved.

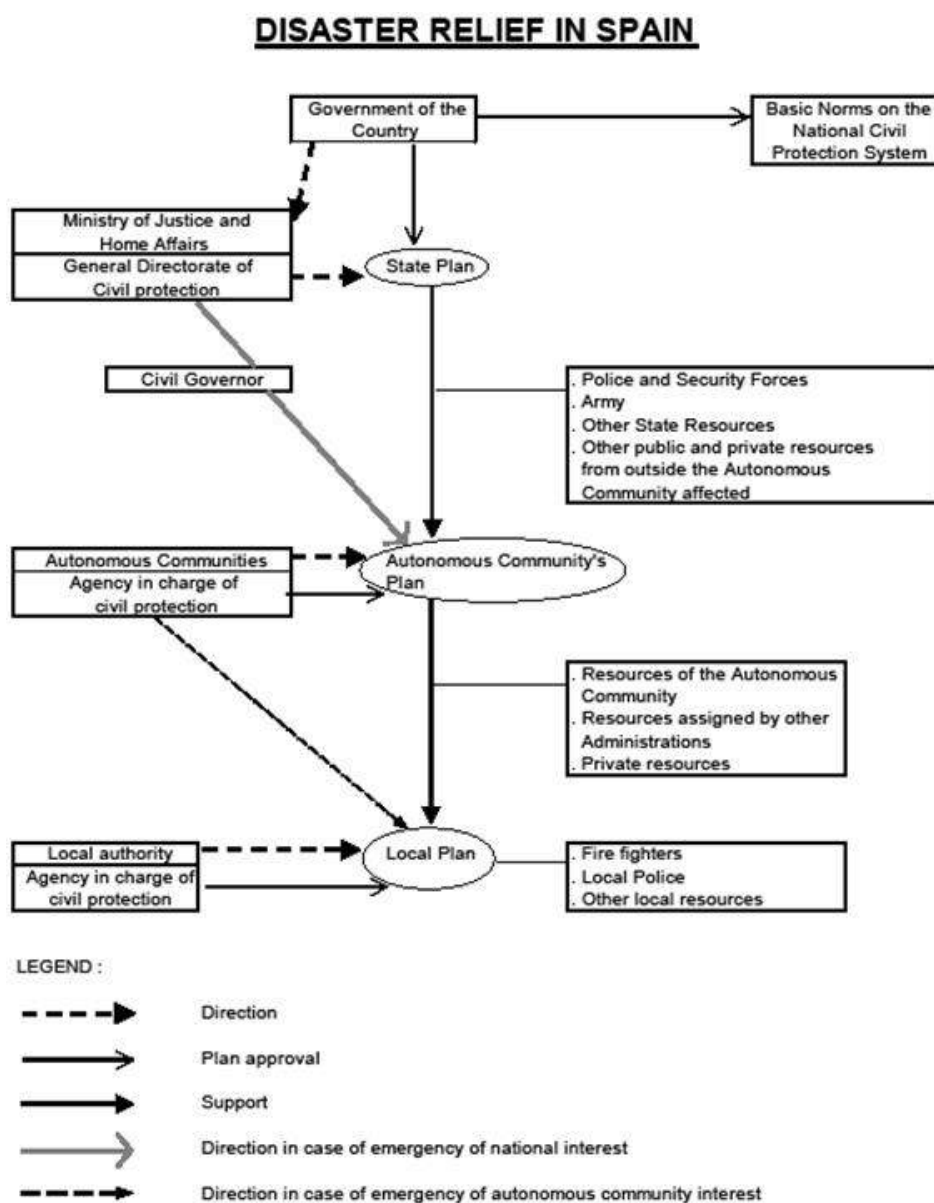


Figure 46: Disaster relief structure in Spain²¹²⁹

2 Legislation

2.1 Crisis (emergency, disaster) management concept

In Spain, there are a series of manual of good practices that defines emergency plans. An emergency plan can be defined as the planning and human organisation used to reduce all the possible human or economic consequences produced by a disaster or emergency situation.

The General Directorate of Civil Protection and Emergencies (GDCPE) has a specific plan for civil protection that establishes

The organisational and functional prevision of the mechanisms for mobilizing the necessary human and material resources for the protection of persons and properties in a serious collective risk, catastrophe or public calamity situation, and also the scheme of coordination between the different public administrations called to intervene²¹³⁰.

The civil protection scope depends on three axes:

- The type of risk that has to be managed;
- Which part of the catastrophe cycle includes (prevision, planning, etc.);
- The level of responsibility it has.

The GDCPE has different plans depending on every situation; in natural risks it has forest fire, earthquakes, volcanos and water dams special plans; in technological risks it has nuclear, chemical and radiological risks plans.

The scope of GDCPE may be national, autonomic or local depending on the severity of the risk or disaster and also depending on where it is located.

2.2 General crisis (emergency, disaster) management law

In Spain, legal basis are divided in different levels:

- National level. At national level exist a series of laws that describes operating method in a crisis situation:
 - Law 17/2015 of Civil Protection:
 - This new law aims to strengthen the mechanisms to enhance and improve the functioning of the national system of protection of citizens in emergency and disaster cases foresaw by the previous law;
 - The civil protection system is understood as an instrument of public safety, integrated into the national security policy²¹³¹.

²¹³⁰ Basic rule of Civil Protection. Royal Decree 407/1992, of 24 April.

²¹³¹ Law 17/2015, of Civil Protection. Accessed February 10, 2016 https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-7730

- Royal Decree 385/2013:
 - Establishes the Delegate Commissions of the Government;
 - Modifies the Royal Decree 1886/2011, of 30 December;
 - Its main objective is the preservation of national security through optimal, integrated and flexible operation of all the resources available for that purpose²¹³².
- Royal Decree 393/2007 of Basic self-protection rules of the centres and establishments that could lead to accident:
 - This Royal Decree defines and develops self-protection and control mechanisms established by the Government. Provides a gradation of self-protection obligations and respects the rules of sector-specific activities that, by their potential dangerousness, importance and potential adverse effects on the population, the environment and property, should have a singular treatment²¹³³.
- *Royal Decree 1883/1996:*
 - *Establishes the new structure of the Ministry of Defence. This document defines the functions of the Policy of Defence Directorate, i.e., concerning Civil Preparedness, Civil Emergency Planning and the Armed Forces cooperation in disaster relief operations.*
- *Ministers Council Agreement, dated 15 January, 1988:*
 - Creates the National Civil Emergency Planning Committee, its composition and functions
 - *Creates the Sectorial Working Committees, dependent upon the National Civil Emergency Planning Committee (CNPCE), for the following sectors: food and drinking water, industry and raw materials, energy, health, civil landing, shipping and aerial transports, civil communications and shelter (protection of the population).*
- *Royal Decree 163/1987:*
 - *Creates a Crisis Management Directorate, as a working support of the system.*
- *Royal Decree 2639/1986:*
 - *Creates the Crisis Cabinet, its composition and its functions. The Crisis Cabinet is the leading authority of the Crisis Management National System.*
- *Prime Minister's National Defence Guideline 1/1986:*

²¹³² Royal Decree 385/2013. Accessed February 10, 2016 <https://www.boe.es/boe/dias/2013/06/01/pdfs/BOE-A-2013-5771.pdf>

²¹³³ Royal Decree 393/2007 of Basic self-protection rules of the centres and establishments that could lead to accident. Accessed February 10, 2016 https://www.boe.es/diario_boe/txt.php?id=BOE-A-2007-6237

- *Creates a Crisis Management National System and a Civil Preparedness National System, compatible and comparable with those of the Atlantic Alliance.*
- *Act 2/1985 about Civil Protection, and the legal arrangements derived of that act:*
 - Defines the Civil Protection concept
 - Establishes guidelines for planning.
- *Organic Act 4/1981 about warning, exceptions and siege situations:*
 - *Defines the above-mentioned situations, establishing the procedures for declaring those situations and the measures that are to be taken in each case.*
- *Organic Act 1/1980 on National Defence:*
 - *Stipulates that the Government shall arrange the contribution of whatever kind of resource that is necessary (human, material, etc., public or private)*
 - *Defines the Civil Defence concept (Civil Preparedness), i.e. the standing availability of all human, material and non-military resources in order to manage major disasters*
 - *Establishes that the Armed Forces will cooperate at the request of civil authorities.*
- *Decree 1125/1976 :*
 - *Establishes civil-military cooperation rules during emergencies*
 - *Settles procedures of request for the cooperation of the Armed Forces*
 - *Specifies that the Military Authorities are to be informed of and participate in the emergency plans produced by the Civil Authorities (at state, regional and local levels) and that they shall have prepared response plans²¹³⁴.*
- At an autonomic level, every autonomous community has its own legislation
- At a local level, every municipality also has its own legislation.

2.3 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In Spain, in the General Directorate of Civil Protection, every administrative level (local, regional, central) needs to have in place a preparedness plan for its focus area. In respect to the local and regional plans, the central government sets minimum criteria for their drafting. This fact is a clear evidence that even though local and regional level have some sort of autonomy, the main responsibility lies with the central government and specifically with the Ministry of Interior.

The local civil protection plan establishes the operating methods depending on the severity of the risks, where the risk is located and also the available resources. There are different phases:

²¹³⁴ Legal basis of General crisis (emergency, disaster) management in Spain. Accessed February 3, 2016 http://ec.europa.eu/echo/files/civil_protection/vademecum/es/2-es-1.html#lega/

- Alert: In this situation citizens have to receive information about the situation and the ways of acting.
- Alarm: In this situation all the local operative services have to be mobilized.

There are also 4 different levels of emergency:

- Level 0: Local emergency controlled by local authorities.
- Level 1: Local emergency that affects an important part of the local territory and needs the mobilization of emergency and security resources.
- Level 2: Local emergency that affects almost all the local territory and needs the mobilization of emergency and security resources and also needs to adopt extraordinary local operating methods to protect citizens.
- Level 3: Local emergency that exceeds the possibilities of the local authorities and requires the help of the autonomic authorities.

There are 4 different levels of severity:

- Level 0: Declared when the situation is controlled by local authorities and does not generate damage to citizens or properties.
- Level 1: Declared when the situation produces considerable damages to properties or the environment.
- Level 2: Declared when the situation produces considerable damages to citizens, properties or the environment.
- Level 3: Declared when the situation produces severe damages to properties or the environment.

2.4 Legal regulations on the involvement of volunteers and specialised NGOs

The Law 6/1996, of 15 January, of volunteering and the different volunteering rules of the autonomous communities agree that volunteering has to be marked by solidarity, wilfulness and liberty, gratuity and a link to volunteer organizations and volunteer programs.

In order for an activity to be considered as volunteering, 4 characteristics must be met:

- Solidarity and altruism – related to the beneficiaries of the benevolent activities
- Freedom – interpreted as the autonomy and good will in order to be part of such activities
- Free of charge – interpreted as the main difference between a working relationship and a volunteering relationship
- Organization – under which such activities are going to be performed within an overall program or project

Law does not cover any activity which main philosophy is different to a disinterested goal as a volunteering activity. In other words, volunteering is out of scope when involving activities with any kind of relationship with relatives, friends, or neighbours, since altruism may be missing from this type of relationship.

3 Organisation

3.1 Organisational chart

The civil protection structure coincides with the administrative structure. The Spanish system consists of three main components:

- The National Security Council (NSC) in his capacity as Delegate Commission of the Government for National Security (DCGNS) that operates under the Royal Decree 385/2013 of 31 May which modifies the Royal Decree 1886/2011, of 30 December where the Delegate Commissions of the Government are established;
- The National Civil Emergency Planning Committee (NCEPC), an inter-ministerial support body;
- The Department of Civil Defence.

The Royal Decree 385/2013 replaces the Delegate Commission of the Government for Crisis Situations (CDGSC) by the National Security Council (NSC). The NSC is formed by:

- The President of the Government;
- The Deputy Prime Minister and Minister of the Presidency;
- The Ministers of Foreign Affairs and Cooperation, Defence, Finance and Public Administration, Home Affairs, Development, Industry, Energy and Tourism and the Economy and Competitiveness;
- The Director of the Office of the Prime Minister, the Secretary of State for Foreign Affairs, the Chief of Staff of Defence, the Secretary of State for Security and the Secretary of State-Director of the National Intelligence Centre.

The NSC has the following functions:

- Assisting the Prime Minister in the direction of the National Security Policy;
- Issue the necessary guidelines for planning and coordination of the National Security Policy;
- Lead and coordinate the activities of crisis management;
- Monitoring the proper functioning of the National Security System;
- To approve the Annual Report of National Security before its presentation in Parliament;
- Promote policy proposals necessary to establish the National Security System and integration within it (i.e. the National System of Crisis Management).²¹³⁵

The National Civil Emergency Planning Committee (NCPCE), an inter-ministerial support function to the Crisis Cabinet, is mainly concerned with tasks related to the provision and implementation of resources in situations of crisis or emergency. The NCPCE has a coordinating role in Spanish Civil Protection and sits at the top of Civil Defence's organisational structure. The Committee is composed of the Crisis Cabinet Secretary (President), the Director General for Defence Policy (First Vice President), the Director General for Civil Protection and Emergencies (Second Vice President) and the

²¹³⁵ Royal Decree 385/2013, of 31 May of the Delegate Commissions of the Government. Accessed February 8, 2016 https://www.boe.es/diario_boe/txt.php?id=BOE-A-2013-5771

Under Director for Civil Preparedness (Secretary). Some of the other members are the Director of the Crisis Staff Department and the Committee President's Advisor on Defence and Security.

The Department of Civil Defence or Civil Protection provides a series of tools that facilitate the ways of action in any risk, emergency or catastrophe situation.

The Civil Protection structure at the state level starts at the General Directorate of Civil Protection and Emergencies (Dirección General de Protección Civil y Emergencias -GDCPE), under the Minister of the Interior. The GDCPE is the State administrative unit in charge of the preparedness and response in case of natural and technological disasters.

In Spain, civil-military cooperation is undertaken in cases of emergency and upon request by civil authorities (Royal Ordinances Act and Basic Judgement Act from the National Defence). A request for cooperation can be made by civil authorities through the Minister of the Interior. In cases of emergency, the request can be made verbally, but needs subsequent written confirmation. Refusal to cooperate is regarded as a criminal offence (Military Penal Code).

The Spanish contribution to the international humanitarian assistance and disaster relief operations is provided through the Monitoring and Information Centre (MIC) operated by the European Commission in the framework of the Community Mechanism to facilitate reinforced cooperation in civil protection assistance interventions and the Euro Atlantic Disaster Response Coordination Centre (EADRCC NATO).

The Directorate General of Civil Protection and Emergencies is responsible for these matters, including the bilateral agreements with France, Portugal and Morocco in general civil protection items. International assistance is offered/requested on a case-by-case basis.

Figure 2 gives an outline of the organisational structure of the disaster relief in Madrid, but it may be used in almost every autonomous community in Spain.

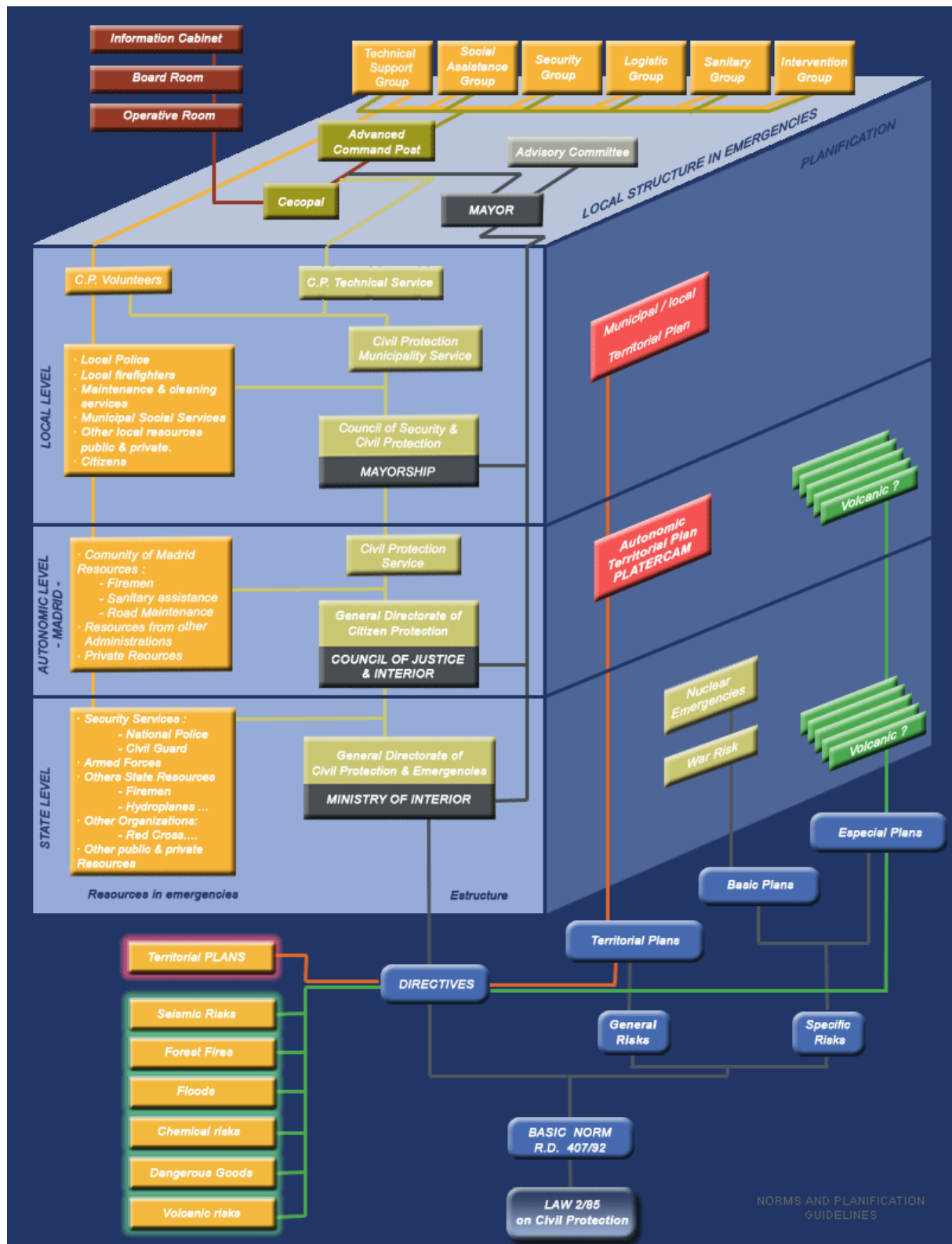


Figure 47: Organisational Chart of the Emergency Management Agency of Madrid, Spain²¹³⁶

²¹³⁶ Organisational Chart of the Emergency Management Agency of Madrid, Spain. Accessed February 3, 2016. <http://www.civilprotection.net/index.phtml?id=124/>

3.2 Organisational cooperation

The Emergency Military Unit (EMU) is a branch of the Spanish Armed Forces which main mission is to intervene anywhere in the country to contribute to the safety and welfare of citizens, along with the public administrations in a serious risk, catastrophe or calamity situation, according to the Organic Law 5/2005, of 17 November²¹³⁷.

The operating methods of UME are centred in save, protect and rescue people, their goods and also the environment.

The EMU intervention may be ordered when a severe emergency situation take place. Those emergency situations are:

- Natural risks such as floods, earthquakes, severe snows and other adverse weather events of great magnitude;
- Forest fires;
- Technological risks such as chemical, nuclear or radiological risks;
- Situations that are consequence of terrorism for example;
- Environmental pollution;
- Those situations President considers as a critical situation.

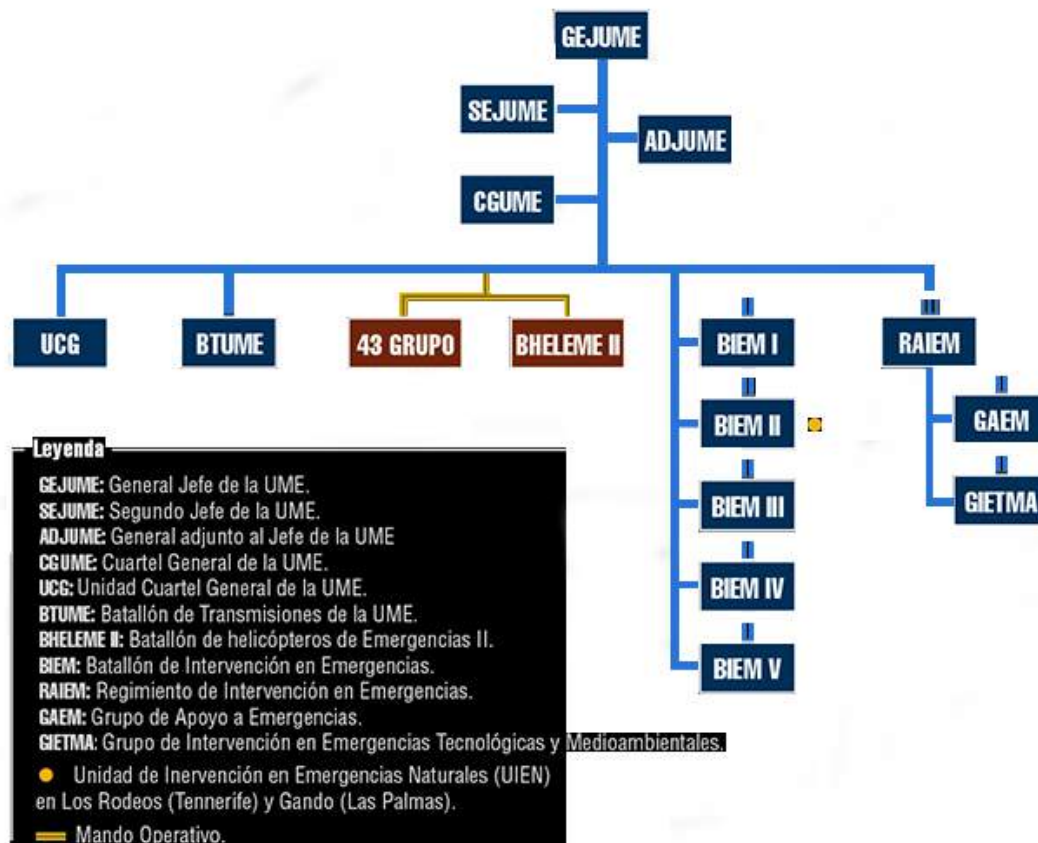
The UME is formed by:

- Headquarters, in Torrejón de Ardoz (Madrid);
- Headquarters unit (UCG), in Torrejón de Ardoz (Madrid);
- Intervention and Support Regiment in Emergencies (RAIEM), in Torrejón de Ardoz (Madrid);
- Transmissions Battalion (BTUME), in Torrejón de Ardoz (Madrid);
- First Emergency Intervention Battalion (BIEM I), in Torrejón de Ardoz (Madrid);
- Second Emergency Intervention Battalion (BIEM II) in Morón (Sevilla). This battalion also has a special unit dedicated to natural emergencies in Canary Island, specifically in Los Rodeos (Tenerife) and Gando (Gran Canaria);
- Third Emergency Intervention Battalion (BIEM III) in Bétera (Valencia);
- Fourth Emergency Intervention Battalion (BIEM IV) in Zaragoza;
- Fifth Emergency Intervention Battalion (BIEM V), in San Andres de Rabanedo (León).

For its operation, the RAIEM is formed by a Command and General Staff a Services and Emergency Support Group and an Emergency Intervention Group in Technological and Environmental situations (GIETMA).

In figure 3, the operational structure of the EMU is shown.

²¹³⁷ Organic Law 5/2005, of 17 November of National Defence. Accessed February 10, 2016. <https://www.boe.es/buscar/pdf/2005/BOE-A-2005-18933-consolidado.pdf>

Figure 48: Operational structure of the EMU ²¹³⁸

²¹³⁸ Operational structure of the EMU. Accessed February 3, 2016
http://www.ume.mde.es/LA_UME_POR_DENTRO/organizacion/

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The technical coordination and monitoring of the activities of the National Commission for Civil Protection stands out as actions linked to the Institutional Relations, as well as preparing and supporting its ordinary meetings and its working groups.

The National Commission for Civil Protection (NCCP), regulated by the Royal Decree 967/2002, is an organism that depends on the Minister of Interior.

Its main function is to establish an appropriate coordination in terms of civil protection between the organisms of the General State Administration and the Autonomous Communities Administrations to guarantee an effective operation method of study and prevention of severe risks, catastrophe or public calamity and the protection and rescue of people and goods.

The functions of the NCCP, established by the Law 2/1985, are:

- *Homologate civil protection plans;*
- *Report civil protection rules at a national level;*
- *Report civil protection regulations that may produce damages to people or goods;*
- *Participate in the coordination actions of organism related to civil protection;*
- *Propose normalization and homologation of techniques and tools that may be used in situations of civil protection.*

Other activities of the Institutional Relations at a national level are:

- Elaborate techniques and civil protection programs for public entities such as General, Autonomic and Local Administrations and also public and private entities;
- Provide technique support and cooperate with Volunteer Civil Protection Groups.

4.2 Operations planning

The National Security may be defined as a State action aimed at protecting liberty and wellness of citizens to guarantee the defence of the country.

The National Security Policy requires permanent planning and definition of the principles and lines of action to respond to nowadays challenges. In Spain, there is a National Security Strategy (NSS).

The NSS is the fundamental articulation of Homeland Security as State Policy. It contains guidelines to allocate all available state resources efficiently for the preservation of the National Security.

The main operation methods are:

- Unity of action. This unit is dedicated to coordinate and engage the national resources under the direction of the President;
- Anticipation and prevention which main actions are to detect and anticipate situations that represent a potential risk for National Security;

- Effectivity and sustainability in the use of the resources;
- Resilience and recovery establish the principle related to the attitude of the human and material resources to cope with flexibility and strength crisis situations and overcome them minimizing their negative consequences.

The National Security has to face a series of risks and threats such as armed conflicts, terrorism, cyber threats, organized crime, economic instability, energetic vulnerability, irregular migratory flows, espionage, emergencies and catastrophes, vulnerability of maritime space and also vulnerability of critical infrastructures.

The National Security provides twelve lines of strategic action, one for each potential risks registered by the government. This document centres its study in emergencies and catastrophes protection. It has a series of operation methods described in the following lines:

- Adoption of an integrated approach and support of actions between central government, the autonomous communities and local authorities, particularly in the areas of detection, planning and development of actions to emergencies and catastrophes for preventive action, a proper response and an efficient use of the limited resources available.
- Development of a framework to encouraging and coordinating efforts, prioritize and optimize resources to achieve common goals.
- Updating and improving the legal framework for protection from emergencies and disasters, with an emphasis on prevention approach to avoid or mitigate the potential adverse impacts of these situations.
- Promoting a culture of prevention among citizens, including knowledge and attitudes of self-protection, strengthening the capacities of resilience to sudden and unexpected emergencies.

There also a series of operation methods described to protect critical infrastructures:

- It is imperative that both the government and private operators take the corresponding responsibility and work in a coordinated way in protecting critical infrastructure in every moment;
- A system of staggered planning, to identify, assess, prevent and mitigate the risks that we face, from the global and strategic perspective, to those assets that are under the responsibility of an operator or organization will be promoted;
- The Government is pursuing a consistent methodology that will allow focusing efforts on the most vital areas.
- Critical infrastructure protection should promote the necessary actions in order to achieve an increase in system capacity that allows Government to continue the operating actions, despite to be subjected to an attack or incident, even if it is in a degraded or weakened state.
- Crisis management at government level organizes all tasks, responsibilities and resources taking into account critical infrastructure as an integral part in the phases of preparedness, response and recovery.

At a local level there are some alert and mobilization procedures. All alert and mobilization procedures to be carried out in each of the phases of the emergency shall be specified. They must ensure at least the following:

- The reception and confirmation of the notice or warning, carrying out its first assessment and establishing the necessary mechanisms for verification;
- The classification of the scope and the emergency phase;

- The notification to the Coordination Centres of different areas, and also to the authorities and bodies that participate in these tasks;
- The organization of alert and mobilization of operational services, as well as the means and special funds;
- Monitoring and control of the actions carried out by the participant services;
- Obtaining all the information related to the development of the situation;
- The transmission of information to authorities and agencies involved;
- Provide information to the citizens;
- Notify the end of the emergency.

4.3 Logistics support in crises

In Spain, the National Hall of Emergencies (NHE) is the department through which the General Directorate of Civil Protection and Emergencies performs management operations and emergency situations. It operates 24 hours a day. The functions of the National Hall of Emergencies are aimed, firstly, to the management of common issues or emergency situations and, second, to have mechanisms for coordination and mobilization of adequate means to deal with, effectively, these situations, which can be summarized as follows:

- Monitoring of alert systems;
- Receiving, evaluating and recording information from the Civil Protection Units and Sub-delegations of the Government and other agencies both domestic and foreign;
- Tracking emergencies that occur anywhere in the country; as well as emergency situations that occur out of the country;
- Provide the necessary support to the activities of the Civil Protection Units and Sub-delegations of the Government in the management of emergencies;
- Mobilization of the existing human and material resources of intervention in the country in emergency situations, in coordination with the delegations and sub-government.
- Extraordinary mobilization of human and material resources (not attached to the territorial plans) intervention, existing in the country in emergency situations, in coordination with the delegations and sub-government. Among them is remarkable the Emergency Military Unit (EMU);
- Provide information on the evolution of emergency and intervention of the General State Administration and other administration;
- Participation in drills related to State Civil Protection Plans at national level.

The EMU is operative and logistical self-sufficient. EMU moves to the affected area with all necessary tools and resources. The resources that belong to EMU are the result of a deep and thorough study that guarantees success in operations by support between units.

The capacity and speed of response, mass employment, sustained effort, flexibility in their deployments and redeployments are characteristics that allow EMU concentrate its resources at any point of the country to deal with any emergency with a total self-sustainment.

There is a branch of the UME called Emergency Support Group (ESG) that provides UME and its specific units the ability of operational and logistical reinforcement supply, maintenance, transport, health, material recovery and logistics management to perform their duties.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The General Directorate for Civil Protection and Emergencies has a series advanced communication systems that make possible the flow of information in any situation of severe risk or disaster.

The Emergency Management System is formed by:

- Portal of Information to citizens (*INFORIESGOS*) the General Directorate of Civil Protection and Emergencies, through this portal, reports timely warnings of civil protection and issues recommendations that enable people to adopt appropriate protective measures and caution. It offers information, maintenance and daily update on the status of risks in Spain, according to the information provided by the competent bodies.
- The Information System of Emergencies Management (ISEM) is a support tool in risk management and emergency situations, facilitating the rapid assessment and risk management, and therefore making decisions.
- The Common Emergency Communication Information System (*CECIS*) is a system developed by the European Commission and is based in a computer application to communicate the National Authorities and Civil Protection organisms in an easier way. With this application any of the 27 Member States of the European Union can ask and also offer resources to the other Member States.

In terms of communication, the Emergency Radio Network (ERN) in Spanish REMER²¹³⁹. REMER is the structured organization in the national territory, constituted by Spanish radio amateurs who lend their collaboration to the official Civil Protection services when it is requested. In other words these people are volunteers that cooperate with civil protection services. Its main objectives are:

- Constitute a radio communication system based on private resources to provide, when necessary, the performance of the public nature of the Radio Network Controller of Civil Protection, supplementing or replacing, as appropriate;
- Provide Spanish radio amateurs, integrated into the network, their collaboration at the operational level and coordination between them and the inclusion, if necessary, of those amateurs who do not belong to the network when their cooperation is necessary.

The Spanish Red Cross shall perform, in cooperation with the other agents and in accordance with its own constitution; civil protection functions in the areas of intervention, support, relief and health and social care.

In terms of radioactivity, the Radioactivity Alert Network (RAR) is the responsible of the communication actions.

The General Directorate for Civil Protection has its own Emergency Communication Network that is called RECO SAT. Its main mission is to ensure the existence of a communication channel in emergencies with the Coordination Centres of the affected areas to monitor the situation, to provide operational coordination and support the necessary actions to protect and save human lives and properties.

²¹³⁹ REMER <http://www.proteccioncivil.es/web/dgpcye/remer/>. Accessed February 3, 2016

5 Capabilities

5.1 Human resources

In Spain, in case of emergency there are different organisations that provide human resources to protect, saving and rescue people. Those organisations are:

- Civil Guard. The Civil Guard is leaded by local or provincial authorities;
- The National Police is leaded by the Operational Centre (CECOP) and also by local or provincial authorities;
- The Military Units are the principal example of organism that cooperate in disaster situations;
- Red Cross;
- Emergency Military Unit (EMU). The EMU is formed by a headquarters and six battalions with a total of 2985 people.

5.2 Materiel (non-financial) resources

The resources of the UME for intervention include 14 air means, 2 ambulances (one advanced life support ambulance Uro VAMTAC and one advanced life support ambulance), 4 fire engines, mobile shelters, 2 boats, 2 snow removal vehicles, 12 vehicles of transport, material CBRN-E and specific means for flooding and communications.

5.3 Training

The Division of Training and Institutional Relations has the following functions:

- The theoretical and practical training in risk management and emergencies;
- The organization and maintenance of a specialized documentary collection;
- The development of education and information programs for the population;
- The development of research and studies on sociological, legal and economic aspects relevant to the activities of civil protection and emergency issues;
- Coordination of relations with the Civil Protection Units and Sub-delegations of the Government and with relevant bodies on civil protection of the autonomous communities and local administrations as well as the organization and maintenance of the Secretariat of the National Commission for Civil Protection.

The National School for Civil Protection (NSCP), created by the Royal Decree 901/1990, of 13 July, is a branch of the General Directorate of Civil Protection and Emergencies that plays, in accordance with the provisions of the article 32 of the Law 17/2015, of 17 July, the following functions:

- Educate and train staff of civil protection services of the General Administration of the State and other public and private institutions;
- Develop actions of R & D +i in the field of civil protection training;

- Cooperate with training centres for civil protection of the other public administrations;
- Cooperate on training activities that are expected under the Civil Protection Mechanism of the European Union or other European initiatives to promote the interoperability of equipment and services.

The functions assigned to the National School of Civil Protection are fit into the General Directorate of Civil Protection and Emergencies.

From the strategic point of view, the mission of the National School of Civil Protection is to implement training policies adopted by those responsible for national civil protection system.

The public training system for civil protection aims to build and maintain skills that people need to effectively play its role.

The mission of the National School of Civil Protection, within the public education system for civil protection, concrete strategies to structure the activities of the National School and they are:

- Design plans focused on the training needs;
- Investigate, design and validate didactic materials that contribute to a participatory homogenization of the system;
- Cooperate with the teaching public systems for civil protection of other countries in order to improve the capabilities of the national system for civil protection;
- Follow quality standards in training and accredited and accepted national and internationally.

5.4 Niche capabilities

One of the focus points of Spain which could be interesting for EU crisis management is the experience with flooding. Spain has a long history of flooding. Floods in Spain are the natural risk that over time has produced the biggest both material damage and loss of life.

There are records of episodes of flooding with serious consequences for the population since ancient times.

Although the hardest hit area is focused on the Mediterranean and Cantabrian coasts and river areas of the great peninsular rivers, the risk of flooding affects practically all the Spanish geography.

In order to minimize the damage caused by flooding, it is necessary to establish hydro meteorological warning systems to enable early decision making necessary to the authorities of the National Civil Protection System.

The system of Hydro meteorological Information and Monitoring will aim to establish procedures to introduce the most relevant on the hydrological phenomena and / or meteorological data that may have an impact on people and / or property in the Spanish territory.

The irregularity of rainfall patterns in Spain has made necessary the construction of a large number of dams and reservoirs to regulate river flows and to prevent flooding.

The period of greatest construction activity of large dams in Spain is between 1960 and 1980. Nowadays in Spain there are more than 1,200 large dams, ranking fifth in the world after China, EEUU, India and the former USSR.

There are a series of operating methods to protect people and their properties:

- Warnings and information to the population;

- Access control and maintenance in the affected areas;
- Rescue and saving people;
- Evacuation and shelter;
- Lifting of temporary dykes and other obstacles that prevent or hinder the passage of water.

According to the article 9 of the Royal Decree 903/2010²¹⁴⁰, of 9 July, of evaluation and manage of floods, flood risk maps for areas identified in the preliminary risk assessment are made. The flood risk maps shall include at least the following information:

- Number of population that may be affected by floods;
- Protected areas for the abstraction of water intended for human consumption, water bodies and recreational areas for the protection of habitats or species that may be affected;
- Type of economic activity of the area potentially affected.

There are hazard and flood risks maps; according to the Royal Decree 903/2010 the hazard and flood risks maps should be subject to public consultation for a minimum period of three months and once they are analysed they has to be sent to the Ministry of Agriculture, Food and Environment for their inclusion in the National System of Flood Zone Mapping.

The Methodological Guide for the development of the National Flood Zone Mapping develops methodologies to generate the mapping of public water resources and flood areas, and also the risk maps.

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

SWEDEN

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: MSB (Kristen Arnell, Marie Norrby)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by ATOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Sweden has three level of governance:

- Local level with 290 municipalities
- Regional level with 21 counties. County boards are the government's regional representatives. County Councils are independent elected bodies
- National level with the Swedish parliament and the government

All three levels have their own elected political assemblies. One level has no jurisdictions over another.

Three main principles:

The responsibility principle

The persons or organisations that are responsible for an activity under normal conditions are also responsible for such operations in an emergency situation.

The equality principle

Operations should, as far as possible, be organized in the same way during emergency situations as under normal conditions.

The proximity principle

Emergencies should be handled at the lowest possible level in society. On a central level the Government is the body responsible for this area, on the regional level it is the County Administrative Board and on the local level it is the municipalities.

First responders

Each of the three first responder organisation have their respective mandate and responsibility during an incident. They are obliged to cooperate with other organisations when deemed necessary.

Police

The Police are a Governmental organisation and responsibility, which is also represented at the regional level. The Police's responsibilities include to prevent and detect criminal activity and other disruptions of public order or safety, monitor the public order and security and intervene when disturbances have occurred, investigation and prosecution of criminal offences which fall within the General prosecution, provide public health, information and other assistance, when such assistance is best given by the police.

Fire and Rescue service

The Fire and Rescue Service are a local and municipality responsibility. Some municipalities cooperate and have a common Rescue Service. The incident commander has the mandate to call in all the resources that he or she needs to handle the incident to save life, environment and properties as long as it is in proportion to the incident.

Ambulance and healthcare

Health care is a County councils responsibility.

MSB's role

MSB is responsible for issues concerning civil protection, public safety, emergency management and civil defence as long as no other authority has responsibility. Responsibility refers to measures taken before, during and after an emergency or crisis

The Swedish structure for civil emergency planning is coordinated by the MSB, which holds the mandate for a holistic and all hazards approach to emergency management. This includes the entire spectrum of threats and risks, from everyday accidents up to major disasters.

Civil protection is defined as public safety in the form of protection from incidents, accidents and other types of emergencies and disasters. The Swedish emergency preparedness system aims to protect life and health, critical infrastructure and fundamental values from all types of hazards and risks through a comprehensive, risk-based, emergency preparedness programme including prevention, planning, preparedness, response and recovery.

MSB works:

- via knowledge enhancement, support, training, exercises, regulation, supervision and our own operations
- in close cooperation with the municipalities, county councils, other authorities, the private sector and various organisations
- to achieve greater security and safety at all levels of society, from local to global level

Table of Contents

SWEDEN Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1542
Overview	1543
Table of Contents	1545
List of Figures	1547
List of Abbreviations.....	1547
1 Policy	1548
1.1 Risk Assessment.....	1548
1.2 Policy and Governance	1548
1.2.1 Strategy scope and focus.....	1548
1.2.2 Monitoring and analytical support to policy making; R&D	1549
1.2.3 Policy for Prevention	1549
1.2.4 Policy for Preparedness.....	1551
1.2.5 Policy for Response	1552
1.2.6 Policy for Relief and Recovery	1553
1.3 Financing.....	1554
1.3.1 Investing in preparedness	1554
1.3.2 Investing in consequence management.....	1554
1.4 Policy review, Evaluation & Organisational Learning	1554
1.4.1 Post-Disaster Assessment.....	1554
1.4.2 Departmental Lessons Learned systems	1554
1.4.3 Centralised (national) Lessons Learned system	1554
1.4.4 International exchange for Lessons Learned.....	1556
1.4.5 Regular policy reviews.....	1556
1.5 Resilience	1556
1.6 Information sharing and data protection	1556
1.6.1 Information classification – a support for information sharing	1556
1.6.2 Registration of volunteers	1557
1.6.3 Information gathering on social media.....	1557
2 Legislation	1558
2.1 Crisis (emergency, disaster) management concept.....	1558
2.1.1 Summary.....	1558

2.1.2	Regulations	1559
2.1.3	The terms crisis, accidents and extraordinary events	1562
2.2	General crisis (emergency, disaster) management law	1562
2.3	Emergency rule	1562
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1563
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1563
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1563
2.7	Legal regulations for international engagements of first responders and crisis managers	1563
3	Organisation	1564
3.1	Organisational chart	1564
3.2	Organisational cooperation	1566
4	Procedures	1567
4.1	Standing Operating Procedures (SOPs) and Guidelines	1567
4.2	Operations planning	1567
4.3	Logistics support in crises	1567
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1567
5	Capabilities	1569
5.1	Human resources	1569
5.2	Materiel (non-financial) resources	1569
5.3	Training	1569
5.4	Procurement	1570
5.4.1	Procurement regulation	1570
5.4.2	Procurement procedures	1570
5.5	Niche capabilities	1571
	Resources	1572
	Legislative acts	1572
	Other normative acts	1572
	Official documents (white papers, strategies, etc.)	1572
	Online resources (e.g. websites of key CM organizations)	1572
	Publications	1572
	Expert interviews	1573

List of Figures

<i>Figure 1: A schematic diagram of how a major rescue operation can be organised</i>	<i>1564</i>
<i>Figure 2: Organisational chart on the Crisis Management structure in Sweden</i>	<i>1565</i>

List of Abbreviations

Abbreviation / acronym	Description
ABBR	Spell the abbreviation here
MSB	Swedish Civil Contingencies Agency
JRCC	Joint Rescue Coordination Centre
SSRS	Swedish Sea Rescue Organisation (Society)
SSM	Swedish Radiation Safety Authority
LEH	Periods of Heightened Alert
LSO	The Civil Protection Act

1 Policy

1.1 Risk Assessment

Risk assessments are done by all public sectors.

Local level: 290 municipalities

Regional level: 21 County Boards, 21 County Councils and 21 Regional Police authorities

National level: 250 governmental agencies

Risk assessments are also done by the private sector in sectors that can affect the population like Seveso and Energy sector.

1.2 Policy and Governance²¹⁴¹

Three main principles roll the Swedish way to handle an incident. It can be small or a large scale incident.

The responsibility principle

The person who is responsible for an activity under normal conditions should also be responsible for such operations in an emergency situation.

The equality principle

Operations should, as far as possible, be organized in the same way during emergency situations as under normal conditions.

The proximity principle

Emergencies should be handled at the lowest possible level in society. On a central level the Government is the body responsible for this area, on the regional level it is the County Administrative Board and on the local level it is the municipalities.

Handling the incident

The incident commander at the local The Fire and Rescue Service has the mandate to call in all the resources that he or she needs to handle the incident to save life, environment and properties as long as it is in proportion to the incident. If more than one municipality are affected, the Incident commanders can ask the Regional County Board to appoint a common incident commander for the major incident.

1.2.1 Strategy scope and focus

All citizens, public and private sector are obliging by law, to prevent, prepare, response and recover from accidents and incidents. It is an all hazardous approach. On the other hand the quality is entire

²¹⁴¹ National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

up to each and every one. The municipality have the main responsibility for the people staying in their area, permanent and temporary. They also audit the private sector to ensure that they have sufficient CM.

The County Board is responsible for auditing Seveso plants and other more dangerous industries in their geographical area including the municipalities to ensure that they have sufficient CM.

MSB, as a governmental agency audit the county boards and also arrange exchange of experience activities among the county boards.

1.2.2 Monitoring and analytical support to policy making; R&D²¹⁴²

Monitoring and analytical support is organised at respective level and actor. In the public sector there are channels for reporting incidents from the municipalities to the County Board to MSB to the Ministry of Interior and the Prime Ministers Crisis Coordination Secretariat. Every national agency reports to their respective ministry. If any actor in an incident needs help they just need to ask for it.

Examples of funding opportunities:

- from MSB funding for research project in the area of Crisis Management, approx. 2 m€/year.
- from MSB project funding for national agencies and county boards aiming to improve cooperation and methods to improve the ability to coop with major incidents, approx. 100m€/year.

1.2.3 Policy for Prevention²¹⁴³

Public Sector

Local level:

The 290 municipalities are responsible to do preventive action and ensure common safety for the population. The area of responsibility goes from safe drinking water, sanitation, schools, elder care, local roads to Fire and Rescue Services. The municipalities are also responsible to audit the private sector.

Regional level:

The 21 County Councils are responsible to do preventive action and ensure common safety for the population in the area of health care.

The 21 County Boards are responsible to audit the municipalities within the county and the private sector that has a higher risk category like Seveso plants. They are also responsible to help and support the municipalities and coordinate prevention action in the region.

The Police are a Governmental organisation and responsibility, which is also represented at the regional level. The Police's responsibilities include to prevent and criminal activity

²¹⁴² Publ.nr: MSB860, april 2015, www.msb.se/rsa

²¹⁴³ Publ.nr: MSB860, april 2015, www.msb.se/rsa

National level:

The 250 national agencies are responsible for their respective area of responsibility. In all agencies that affect or can affect the environment, people or properties shall have implemented activities that aim to reduce the risks.

Private sector

All companies and organisation that affect or can affect the environment, people or properties shall have prevention activities that aim to reduce the risks.

Voluntary sector

All organisations that affect or can affect the environment, people or properties shall have prevention activities that aim to reduce the risks from their activities. Some voluntary organisations are active in preventing activities towards the general public such as giving first aid courses, swimming lessons and safety on water.

1.2.4 Policy for Preparedness²¹⁴⁴

Public Sector*Local level:*

The 290 municipalities are responsible to do preparedness action and ensure common safety for the population. The area of responsibility goes from safe drinking water, sanitation, schools, local roads to Fire and Rescue Services. The municipalities are also responsible to audit the private sector.

Regional level:

The 21 County Councils are responsible to do preparedness action and ensure common safety for the population in the area of health care.

The 21 County Boards are responsible to audit the municipalities within the county. They are also responsible to help and support the municipalities and coordinate prevention action in the region.

The Police are a Governmental organisation and responsibility, which is also represented at the regional level. The Police's responsibilities include detecting criminal activity and other disruptions of public order or safety.

National level:

The 250 national agencies are responsible for respective area of responsibility. All agencies and that affect or can affect the environment, people or properties shall have activities that aim to reduce the risks. All agencies are responsible in their respective are

Private sector

²¹⁴⁴ National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

All companies and organisation that affects or can affect the environment, people or properties shall have activities that aim to reduce the risks and have preparedness to handle known risks.

Voluntary sector

All organisations that affects or can affect the environment, people or properties shall have preparedness activities that aim to reduce the risks and handle the consequences. Some voluntary organisations are prepared to act in case of emergency both with personal and other recourses like SSSR, Swedish Sea Rescue Organisation that handle 70% of the rescue operations at sea in Sweden.

1.2.5 Policy for Response²¹⁴⁵

Public Sector

Local level:

The 290 municipalities are responsible to respond to accidents and incidents Fire and Rescue Services.

Regional level:

The 21 County Councils are responsible to respond to accident and other health related issues and incident to ensure the emergency capacities for the population.

The 21 County Boards are responsible to audit the municipalities within the county. They are also responsible to help and support the municipalities in the region during an incident.

The Police are a Governmental organisation and responsibility, which is also represented at the regional level. The Police's responsibilities include monitor the public order and security and intervene when disturbances have occurred, provide public health, information and other assistance, when such assistance is best given by the police.

National level:

The 250 national agencies are responsible for respective area of responsibility. All agencies and that affect or can affect the environment, people or properties shall have activities that aim to reduce the risks. All agencies are responsible in their respective area.

Private sector

All companies and organisation that affects or can affect the environment, people or properties shall have activities that aim to reduce the risks. Seveso plants needs to be able to respond to known risks. It can be organised like as a rescue service brigade in the industry.

Voluntary sector

All organisations that affects or can affect the environment, people or properties shall have ability to handle known risks that their own activity causes. Some voluntary organisations act in response to

²¹⁴⁵ National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

emergency both with personal and other recourses like SSSR, Swedish Sea Rescue Organisation that handle 70 % of the rescue operations at sea in Sweden.

1.2.6 Policy for Relief and Recovery²¹⁴⁶

Public Sector

Local level:

The 290 municipalities are responsible to have pre planned actions and ensure common safety for the population after an incident. The area of responsibility goes from safe drinking water, sanitation, elder care, schools, local roads to Fire and Rescue Services. The municipalities are also responsible to audit the private sector that can affect the population and nature negative, for example Seveso plants. Temporary shelters or housing to the effected and help for recovery are also part of the responsibility of municipalises.

Regional level:

The 21 County Councils are responsible to do preventive action and ensure common safety for the population in the area of health care.

The 21 County Boards are responsible to audit the municipalities within the county. They are also responsible to help and support the municipalities and coordinate prevention action in the region.

The Police are a Governmental organisation and responsibility, which is also represented at the regional level. The Police's responsibilities include to investigate and prosecution of criminal offences which fall within the General prosecution.

National level:

The 250 national agencies are responsible for respective area of responsibility. All agencies and that affect or can affect the environment, people or properties shall have activities that aim to reduce the risks. All agencies are responsible in their respective are

Private sector

All companies and organisation that affects or can affect the environment, people or properties shall have activities that aim to reduce the risks.

Voluntary sector

All organisations that affects or can affect the environment, people or properties shall have prevention activities that aim to reduce the risks.

²¹⁴⁶ National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

1.3 Financing²¹⁴⁷

1.3.1 Investing in preparedness

At the national level the investment in preparedness is mostly done by education, training and pre-arranged cooperation, as well as the sharing of knowledge. The states own material resources have been phased out to a large extent. Some of the agencies have duty officers that can be reached 24/7, like the police and 112 –Alarm Centres.

At the local level the investment in preparedness is in the Rescue services and the technical department, to be prepared to deal practical to incidents.

1.3.2 Investing in consequence management

The management of the consequences of incidents is a logical part of being prepared. The major responsibility is at the local level in the municipalities and the rescue services. The investments are in the employees and the resources they need, to be able to handle the risks that exists in the municipality. Exercise and training is the main tool to be prepared.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Individuals receive help from the municipality and the county council. POSOM groups and other personal help are organised so that, if need, the affected get for example a temporary shelter and psychosocial support.

1.4.2 Departmental Lessons Learned systems

The municipalities and county council have a common organisation the share different experience.

1.4.3 Centralised (national) Lessons Learned system

There is not one centralised system. Every sector and agency has their own responsibility. SCB, Statistics Sweden, is the national agency that collects statistics from a variety of sectors. Some sectors like dangerous goods have several agencies and actors that collect statistics and experiences. Below are some examples.

In the spectra of social and health care there is a national lessons learned system, both for the municipalities and county councils.

²¹⁴⁷ www.msb.se

To investigate major accidents and incidents there is a special agency, Swedish Accident Investigation Authority. They provide reports and recommendation to improve and provide opportunities for lessons learnt.

MSB has a project going on called After Action Revue towards the Rescue Service Sector, which has been well received. The result will be voluntary for the municipalities to implement.

1.4.4 International exchange for Lessons Learned

Some examples:

MSB, together with other governmental agencies, arrange observation studies when they identify incidents of interest to learn from.

The Nordic countries have ongoing cooperation in different areas. Nordred Agreement, HAGA declaration, Nordhels are some of them.

CTIF is an international organisation that has national sub-organisation. The purpose is to learn from each other and incidents that has append, from fire to hazardous materials. <http://ctif.org/>

1.4.5 Regular policy reviews

After every election there is a review of the Risk and vulnerability analysis and action program. The level of ability is then reviewed and the new policies are set at the local level.

1.5 Resilience

The implementation of the concept resilience is done in Sweden.

Responsible for working with the protection of vital services and critical infrastructure rests in accordance with the principle of responsibility of each sector, as well as the owners and proprietors of businesses.

At the national level a national strategy and action plan for the protection of vital infrastructure as well as guidelines has been produced. A committee has also been established with representatives from local, regional and national level to share experience and evolve the resilience in the society.

Swedish Standard Institute SS-ISO 22301 decision in SIS/DK 494 based on ISO 22301 has been adopted as a Swedish standard.

1.6 Information sharing and data protection

1.6.1 Information classification – a support for information sharing

Central government authorities are required to introduce a management system for information security (LIS). This process consists of several components, including the operational analysis, which is of directly beneficial when sharing information. This operational analysis should contain: information identification, requirements identification and information classification. Both information identification and information classification can serve as a support when working out whether or not certain information is protected by secrecy. In the event of societal disruptions, all information is not always classified, but classification should still be able to provide good support in many contexts where information is shared.

Personal information Law (PUL) and Inspire directive are implemented.

Each municipality have responsibility to ensure the safety of it citizens. The Social office, in the municipality is always involved when evacuation needs to be done.

Each sector is responsible to arrange within the law how information can and need to be shared.

Even when there is a crisis the sharing of personal data is still restricted. Therefore the responsible agency is a vital actor in the handling of the incident.

Each citizen has the right to know what kind of threats that normally exist within the municipality, like the risks for flooding or Seveso plants.

1.6.2 Registration of volunteers

Every Voluntary organisation in itself has its own register of members.

One example is FRG, Voluntary Recourse Group, that organizes several voluntary organisations in each municipality. Local FRG have signed an agreement with 125 of the 290 municipalities. The agreement is about how and when the FRG group can assist during an incident.

1.6.3 Information gathering on social media

There is no national plan to gather information during crisis from social media. Krisinformation.se that MSB host does however use scanning as a way to update the information on the web site on regular bases.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

2.1.1 Summary

The following is a summary of the central regulations in the area of emergency preparedness and other regulations that are relevant to the management of societal disruptions; the latter is here referred to as sectoral legislation. Sectoral legislation comprises regulations concerning a specific area such as emergency services, social services or police activities. With some of the regulations, there are also descriptions of central terms. In addition to that a set basic principle has been developed to guide the actors on how to act.

2.1.1.1 Basic principles

The Swedish system for civil contingencies is fundamentally regulated by the principles of responsibility, proximity and similarity. This is evident in various official reports, preparatory works and government bills, but the principles as such are not defined in law. They should instead be understood as a background to the current regulatory framework and the actors' missions and mandates.

Principle of responsibility

The principle of responsibility means that those actors who are responsible for a certain activity under normal circumstances retain this responsibility in the event of societal disruptions. The Government has made it clear that the principle of responsibility also means that all actors affected either directly or indirectly by a disruption that have the capacity to assist in managing its consequences have a responsibility to act, even in uncertain situations. The principle of responsibility also means that actors are obliged to support and collaborate with each other. This has come to be called the “expanded principle of responsibility”.

Principle of proximity

The principle of proximity means that societal disruptions are to be managed where they occur and by those actors most closely affected and responsible.

Principle of similarity

The principle of similarity means that actors are not to make changes to their organisational structure that are more substantial than the situation demands. Accordingly, in the event of societal disruptions, operations are to continue to function as they do under normal circumstances, to the extent possible.

2.1.2 Regulations

2.1.2.1 The Instrument of Government (1974:152)

The Instrument of Government contains regulations on how Sweden is governed, on the central actors and their function and mandates, and on the regulations concerning fundamental rights and freedoms. The Instrument of Government is one of Sweden's fundamental laws and therefore takes precedence over all other provisions. Two central themes in the Instrument of Government particularly affect the management of societal disruptions, namely the principle of legality and the role of the Government.

The principle of legality means that all exercise of public power shall ultimately be supported in law. In practice, this means that all public-sector actors must have constitutional support in order to act. This also applies to decisions by the Government.

The role of the Government is to have the highest executive power in the country. The Government has primary responsibility for the structure of state administration building and decides, among other things, on the conditions for each authority's activities. However, it is not permitted for the Government to interfere in authority matters concerning the exercise of authority or the application of law.

2.1.2.2 Decision No 1313/2013/EU of the European Parliament and of the Council on a Union Civil Protection Mechanism

The EU's new civil protection legislation entered into force in December 2013. It thus replaces the earlier decision on the Community's civil protection mechanism from 2007 and the decision on the financial instrument from the same year. The new legislation captures recent years' developments in the area of civil protection, which covers such things as an increased focus on preventive measures and risk management. Civil Protection Cooperation today covers the entire disaster management cycle, including preparatory measures in the form of training, exercises and a programme for experience feedback. Response cooperation has also undergone development, and the new legislation establishes, among other things, a new initiative in the form of a voluntary pool of response capacities (modules) and of experts that are pre-committed by Member States for operations inside and outside the Union. Sweden intends to register a number of modules for the new pool.

2.1.2.3 The Act (1992:1403) concerning Total Defence and Heightened Alert

The Act concerning Total Defence and Heightened Alert regulates, among other things, what total defence and heightened alert are, and establishes that total defence resources are to be designed in a way that can also strengthen society's capability to prevent and manage severe stresses on society. In a state of heightened alert, municipalities and county councils are to take special measures to complete their total defence tasks under the prevailing circumstances.

2.1.2.4 The Emergency Management and Heightened Alert Ordinance (2006:942)

The Emergency Management and Heightened Alert Ordinance (the Emergency Management Ordinance) regulates, among other things, how central government authorities are, through their activities, to reduce society's vulnerability and develop a good capability to manage their tasks, both during crisis situations in peacetime and during periods of heightened alert.

An appendix to the Emergency Management Ordinance states which central government authorities have a special responsibility for emergency preparedness, before and in a state of heightened alert, respectively. According to this, every central government authority whose area of responsibility is affected by a crisis situation is to take the measures necessary for managing the consequences of the crisis situation. The authorities are also to collaborate and support each other in such a crisis situation.

The Emergency Management Ordinance also establishes the geographical responsibilities of the county administrative boards and the obligation of the authorities to provide information to the Government and MSB in a crisis situation.

According to the Emergency Management Ordinance, *emergency preparedness* is the capability to prevent, resist and manage crisis situations through training, exercises and other measures and through the organisation and structures created before, during and after a crisis. The term crisis is not defined in the Ordinance, but an explanation is given in preparatory works.

2.1.2.5 The Act (2006:544) on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert

The Act on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert (LEH) regulates, among other things, how municipalities and county councils are to reduce the vulnerability of their activities and establishes that they are to have a good capability to manage crisis situations in peacetime. In doing so, municipalities and county councils are also to achieve a basic capability for civil defence. LEH also establishes the geographical responsibilities of municipalities and their reporting obligation to the county administrative board in an extraordinary event.

According to LEH, an *extraordinary event* is such an event that deviates from the normal, entails a serious disruption or imminent risk of a serious disruption in important societal functions and requires urgent action by a municipality or a county council.

2.1.2.6 The Ordinance (2006:637) on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert

The Ordinance on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert contains, among other things, more detailed provisions on how municipalities and county councils are to report prior to and during extraordinary events.

2.1.2.7 The Civil Protection Act (2003:778) (LSO)

The Civil Protection Act (LSO) regulates, among other things, the responsibility of municipalities and central government to carry out rescue operations. LSO also contains special mandates for emergency service bodies, the right to encroach on the rights of others, the right to compel individuals to help in an operation through the duty to serve and emergency service bodies' right to request central government and municipal assistance. The Act also contains provisions on emergency services during heightened alert.

According to LSO, *emergency services* are the rescue operations for which municipalities and central government are responsible in accidents and the imminent danger of accidents in order to prevent and limit harm to people, property or the environment.

2.1.2.8 The Civil Protection Ordinance (2003:789)

The Civil Protection Ordinance contains, among other things, more detailed provisions about which actors are responsible for central government emergency services and emergency services upon the discharge of radioactive substances and remediation. The Ordinance also regulates when the county administrative board may assume responsibility for rescue operations in municipal emergency services.

2.1.2.9 The Police Act (1984:387)

The Police Act establishes, among other things, that the police service is to work to maintain public order and safety, and otherwise ensure the general public protection and other assistance to promote justice and security. The police also to collaborate with other authorities whose operations concern police activities. This particularly applies to social services authorities.

2.1.2.10 The Social Services Act (2001:453)

The Social Services Act is the legislation that ultimately regulates people's right to basic needs such as a roof over their head, food and water. The Social Services Act states that the municipality has the ultimate responsibility for persons that are in the municipality. This means that the municipality's responsibility is thus not limited to residents of the municipality, but covers all those who for some reason are in the municipality.

2.1.2.11 The Health and Medical Services Act (1982:763)

The Health and Medical Services Act regulates the tasks and obligations of health care providers to offer care. Under the Act, it is the county council's responsibility to offer good health and medical care to its residents and to plan its health and medical care so as to maintain disaster medicine preparedness.

2.1.2.12 The Swedish Local Government Act (1991:900)

The Swedish Local Government Act regulates, among other things, the forms for the organisation of municipalities and the activities they may conduct (*municipal competence*).

2.1.2.13 The Ordinance (2007:825) with Instructions for the County Administrative Boards

The Ordinance with Instructions for the County Administrative Boards regulates the general tasks and mandate of the county administrative boards. The county administrative boards have, among other things, tasks that have to do with civil protection, emergency preparedness and civil defence. The instruction also establishes the geographical responsibilities of the county administrative boards under the Emergency Management and Heightened Alert Ordinance (2006:942).

2.1.2.14 The Swedish National Board of Health and Welfare's regulations and general advice (SOSFS 2013:22) on disaster medicine preparedness

These regulations state, among other things, which capability the county council is to have in a serious event, that each county council is to have a disaster medicine preparedness plan and the functions of duty officer (TiB) and special health care command.

2.1.3 The terms crisis, accidents and extraordinary events

The central regulatory frameworks for crisis management and sectoral legislation regulate partly different societal disruptions, and the regulatory frameworks also use different terms. The Emergency Management Ordinance speaks of “crisis”, while LEH speaks of “extraordinary events”. In addition to this, the sectoral legislation regulates various events, such as the LSO term “accidents”. When referring to specific legal regulation, it is important to use its terminology. This also applies to this material, which means that terms such as “crisis” and “emergency preparedness” are used when referring to a specific regulation or a preparatory work in which these terms appear. The term societal disruptions, in turn, is not a legal term but is used to encompass the various events that the regulations might cover.

2.2 General crisis (emergency, disaster) management law

Please refer to Section 2.2.

2.3 Emergency rule

Municipalities' Rescue Services always have to have an incident commander. The incident commander has, according to Extra Civil Protection Act, LSO, far reaching powers to engage people and resources that he/she need to handle the incident, but not without paying for it.

The County Councils' representative in the health care authorities during a pandemic or for specified dangerous diseases also have far reaching powers to for example isolate people.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

During peacetime the society's institutions have the same mandate regardless if it is a crisis, large scale incident or a minor incident.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

During peacetime the society's institutions have the same mandate regardless if it is a crisis, large scale incident or a minor incident.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

There is no specific legislation regarding NGO's involvement during a crisis. The municipalities and the volunteers can cooperate if they find a mutual understanding. There are many volunteer organisations in Sweden with a vast variety of capacities and interests. The municipalities have a good local knowledge and a lot of what the inhabitants do during their spare time is done in one of the local voluntary organisation.

2.7 Legal regulations for international engagements of first responders and crisis managers

To engage first responders in the Nordic countries have already been dealt with threw multilateral agreements. Cross border cooperation is done on regularly bases directly between the municipalities and the County Councils. Some regions also have Cross boarder councils including County boards and municipalities, rescues services and healthcare.

Point of Contact for EU/ERCC is MSB and the Swedish Coast Guard. If an incident commander needs these recourses they need to contact MSB. MSB needs to inform the government before contacting ERCC.

If UN needs to be invited to assist Sweden, both of the government and the municipality needs to agree on the invitation.

The incident commander and the municipality still have the responsibility for the incident.

3 Organisation

3.1 Organisational chart

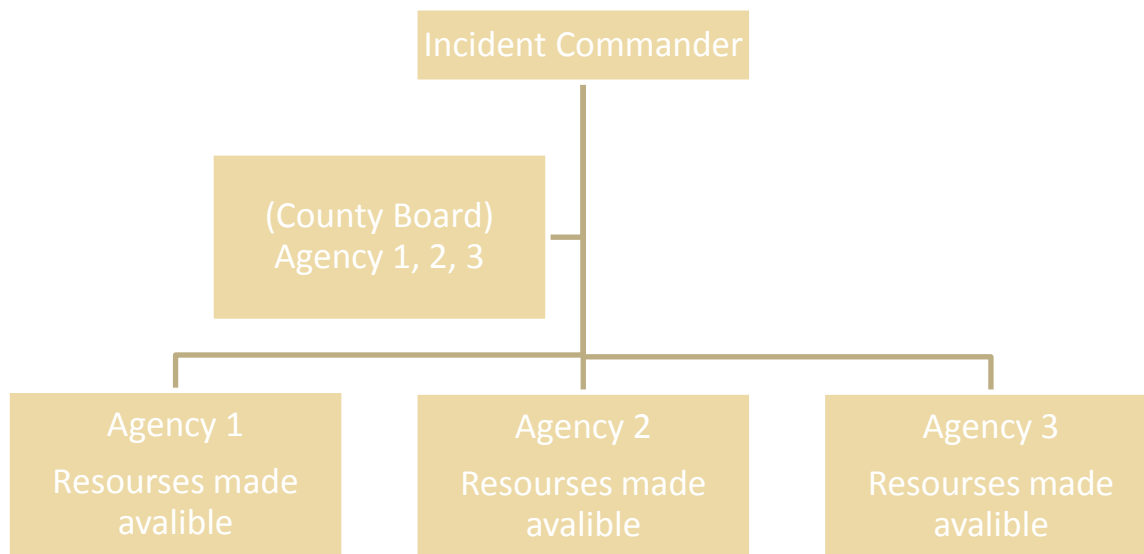


Figure 49: A schematic diagram of how a major rescue operation can be organised

- National/ IO authority for emergency and disaster management; chain of command and high-level decision-making:
The incident commander is the commander during a rescue operation. The Commander can request more resources and help. All tactical and operational decisions rest at the local level even when there is a crisis. The politicians may need to make funding available to handle the incident.
- Interdepartmental (inter-ministerial) emergency and disaster management authority:
The ministries have a group to keep them informed. MSB and other affected agencies inform the government on regular base during a major incident. The government can decide, if needed, to allocate more resources, if necessary.
- National permanent emergency and disaster management unit(s)/ formations; first responders:
There are no national First responders, except for Special police forces, mountain rescue, sea rescue, nuclear plants accidents and maritime environment rescue operation.
- Planned/ anticipated use of specialised military assets :
Civil agencies and rescue service can ask for the resources that the military have, but it needs to be approved by the military. The local first responder's organisations may also have pre planned cooperation, and then the military, if they agree to help, is under the command of the incident commander.

- Departmental emergency and disaster management arrangements:
Each department need to have their own disaster management arrangement, including pre planned cooperation with others. It is each organisations own responsibility.
- Other national civil service organisations:
MSB is appointed to coordinate and encourage cooperation between national civil service organisations: special police forces, mountain rescue, sea rescue, nuclear plant accident and maritime environment rescue operation.

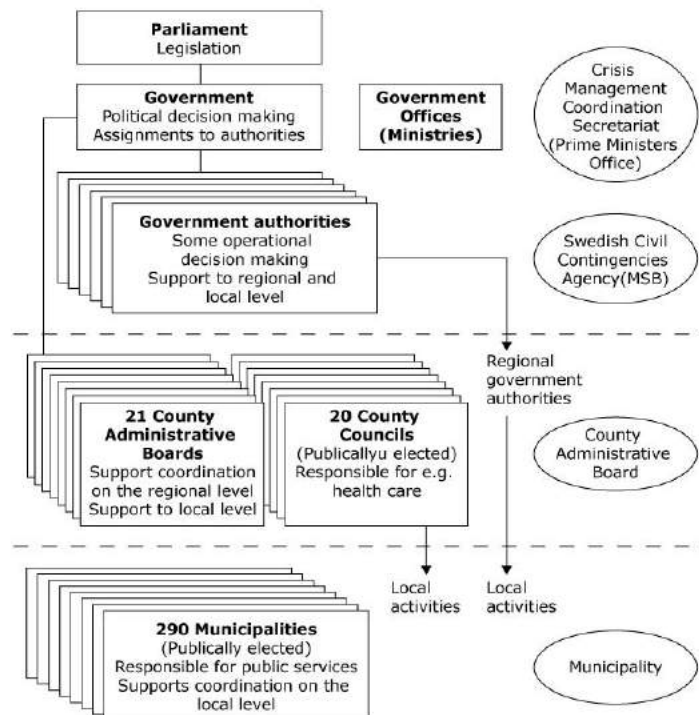


Figure 50: Organisational chart on the Crisis Management structure in Sweden

Source: VADEMECUM http://ec.europa.eu/echo/files/civil_protection/vademecum/se/2-se-1.html#orga

- Provincial (regional) authorities and arrangements for emergency and disaster management (e.g. crisis HQ):
County Boards, Hospital Areas and municipalities are obliging to plan. Local (municipal, town) authorities have arrangements for emergency and disaster management County Boards, Hospital Areas and municipalities are obliging to plan. Local (municipal, town) authorities have arrangements for emergency and disaster management
- Local (municipal, town) authorities and arrangements for emergency and disaster management:
County Boards, County Councils and municipalities are obliging to plan. Local (municipal, town) authorities have arrangements for emergency and disaster management.
- Volunteers and volunteer organisations; specialised NGOs

FRG, Voluntary resource Group organises voluntary organisations, as well as voluntary civil defences group. They have capacity to be engaged in search and rescue operations both on land at sea. They also have flying capacities. SRSS handle 70 % of the sea rescue operations.

- Private businesses:

As private business you are obliged to protect yourself and your property. You are also obliged to prevent further damages, if possible.

In some sectors there are more regulations, transport of dangerous goods, Seveso plants, energy sector etc.

Below is a scheme of the society. The support is going towards the incident commander at the local level. The levels are not chain of command or a hierarchy it is a way of describing local, regional and national agencies and their respective responsibilities.

3.2 Organisational cooperation

- Operational cooperation (e.g., coordinated CM operations planning and response at national level, cross-border operational cooperation, operational cooperation within the EU)

Each incident commander prioritises within the municipality. The County Board may priorities national and international recourses that is available.

Nordred agreement is a foundation for Nordic cooperation. The municipalities on both side of the border do in a practical way. Examples of local agreements and procedures are found at www.nordred.org MSB is the focal point to interact with EU civil protection mechanism.

- Cooperation and coordination in CM capability development (coordinated departmental CM capability planning, nationally centralized CM capability planning, multi-nation/ EU-level coordination of capability planning and capability development)

Cooperation is vital to handle all incidents. The incident commander is responsible to organise the cooperation and all parties are responsible to cooperate and make resources available for the incident commander. Every sector is responsible to handle their part of the incident. Cooperation is a vital part of the legislation in the Nordic countries legislation. The Nordred agreement and Haga declaration means that there exists several on gong cooperation, both at local regional and national level. CM is a challenge since the decentralised local CM system. There is an ongoing exchange of experience and sharing of knowledge.

On EU-level MSB is represented in the Module group discussing mainly HNS and the Voluntary Pool. MSb frequently engage itself in different EU-project with aim developing capabilities that are not only specific to the Swedish context.

MSB has an ongoing developing agreement with DHS in the USA.

4 Procedures²¹⁴⁸

4.1 Standing Operating Procedures (SOPs) and Guidelines

Until recently a common SOP has not been implemented in Sweden, each and every actor has been responsible to implement SOPs within their own responsibility. During 2015 MSB has started to implement “Common Guidelines for Collaboration and Command in Societal Disruptions” as a foundation for joint SOPs between several actors.

4.2 Operations planning

Depending on the risk and responsibility each organisation has its own operations planning. The auditing that the County Boards and MSB do of the plans for operation, highlight the organisations that don’t meet a minimum level of safety that the public can expect.

4.3 Logistics support in crises

Depending on the risk and responsibility each organisation has plans for their own needs of logistics support.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Each municipality, county board and governmental agency has to plan and implement their own crisis communication plan.

At the local level, the municipality has a Crisis Board. They also have a command centre; which can be used during a crisis.

At the regional level, the County Board has a command centre. The County Board have a telephone- or video conference with the municipalities in the region at regular intervals, to test the systems and to keep one on other informed.

Emergency alerts can be sent out through the radio and television, both locally and nationally. MSB have a website for crisis communication and an e-mail tool to facilitate sharing of information.

MSB host a web site, with www.krisinformation.se, collect information from the municipalities’ web pages. The web site can also host information during major incidents, to help municipalities and county boards since it is more robust and built to withstand crisis.

²¹⁴⁸ National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

The local incident commander has access to use the emergency alert system via media. Alerts can be sent out through television and radio. The system is tested 4 times a year. (VMA – Warning Messages to the Public)

MSB and The Swedish Coast Guard is point of contact to EU/ERCC. MSB is also responsible to have equipment to facilitate telephone conference among effected agencies.

Other sectors have their respective focal point. For example is SSM focal point for new clear plants accident threw to IAEA and

5 Capabilities

5.1 Human resources

Each organisation is responsible to oversee their own needs for competencies, there is no organisation responsible to have human resources in reserve. When a disruption causes strain on human resources different organisations volunteer to pool and share resources.

5.2 Materiel (non-financial) resources

- What specific non-financial resources (dedicated equipment etc.) have been allocated to crisis management (central, regional, local preparedness and response)?
 - All sectors and levels have their own pre planning to handle an emergency. Municipalities, county boards, county councils, emergency hospitals, appointed governmental agencies; all have a secure command centre that can operate during a crisis.
 - Some examples:
 - MSB has some specific recourse for flooding, forest fires, chemical accidents and oil spill.
 - The energy sector has their recourses, like personnel on call.
- Permanent reserve stocks (fuel, food, medicines, tents, blankets, etc.)
 - Stock of medicines (National founded)
 - Municipalities and County Council may have their own.
- Planned /anticipated/ involvement of specific military assets (e.g. reconnaissance assets, search and rescue helicopters, fire-fighting planes/helicopters, CBRN, etc.)
 - These assets exist among civil agencies like the Swedish Coast Guard, Police, and Swedish Maritime Administration. The military is not allowed to act in the civil domain.
- Is provision made for governments to mobilise or commandeer private assets during crises?
 - No it is provision made for the local municipality and the incident commander during a rescue operation, to mobilise or commandeer private assets during crisis.

5.3 Training

- National, local and departmental exercises:
 - MSB organise a table top crisis management exercise every third? year for national agencies.
 - Every County Board organise on regularly base table top exercise in their respective region.
 - Every municipality organise on regularly base table top exercise in their respective region.
- Centralised specialist training:
 - MSB organise training for UN, EU, Swedish national, regional and local agencies.

- Training of volunteers and NGO personnel
-FRG among other voluntary organisations organises training, with funding from MSB. SSSR have regular training for their volunteers.
- Cross-border and multinational training activities
-Barents Rescue is a major exercise between Sweden, Norway, Finland and Russia every third year. There are many exercises done every year.
- Is there a certification system? What standards are used to define specialists' training requirements?
Sweden don't have a certification system for specialists training requirement. The employer may implement ISO standards if they find it appropriate.
- Are there specialised training programmes for high-level decision makers?
One example is the course called "Solbacka kursen" that engage High Level decision makers in Crisis coordination and cooperation.
<http://www.fhs.se/sv/utbildning/uppdagsutbildningar/krishantering/solbackakursen/>,
- Training centres
MSB have two training colleges. The Police College, Swedish Coast Guards training center and the national Defence College are some of the others.

5.4 Procurement

5.4.1 Procurement regulation

Procurement regulation in the public sector is strict. Best value for many is the basic rule. Cooperation between the different agencies in the public sector is however encouraged

Procurement regulations at an EU-level:

All articles are implemented and needs to be followed. If it is a sudden unexpected crisis you are allowed to buy what you need to handle the situation.

5.4.2 Procurement procedures

The public sector at all levels has their own procurement organisation that deals with procurements. Since 2011, certain public procurement activities have been centralized in a new agency, the National Procurement Services, which *provides central government authorities coordinated framework agreements for goods and services of general use*²¹⁴⁹.

²¹⁴⁹ Coordinated framework agreements in Sweden <http://www.avropa.se/topplankar/In-English/>

5.5 Niche capabilities

JRCC has flying and sea going capacities for sea rescue operations.

The police have Special Forces for rescue operation in mountainous areas.

The Swedish Coast Guard has ships and flying capabilities for environment operations at sea.

Resources

Legislative acts

Please refer to Section 2.2.

Other normative acts

The national agencies can write normative acts in their area of competence.

For example MSB gives out recommendations MSBFS:

<https://www.msb.se/sv/Om-MSB/Lag-och-ratt/Gallande-regler/Skydd-mot-olyckor/MSBFS-20125/>

Socialstyrelsen –The National Board of Health and Welfare has recommendations in a series SOSFS.

<http://www.socialstyrelsen.se/sosfs>

Official documents (white papers, strategies, etc.)

<http://www.sou.gov.se/> collects all the finished and ongoing policy investigations ordered by the government.

Online resources (e.g. websites of key CM organizations)

www.msb.se

<https://www.msb.se/en/Products/Support-systems-/>

www.socialstyrelsen.se

www.polisen.se

www.skl.se

www.government.se

Publications

Video and publication library:

<https://www.msb.se/en/Products/90-Sekunder/>

<https://www.msb.se/en/Products/Publications/>

Some examples of publications:

- A first step towards a national risk assessment
- Swedish national risk assessment 2012

(<https://www.msb.se/en/Prevention/National-risk-and-capability-assessment/>)

- Uncertain futures
- Five challenging future scenarios for societal security,
- Strategic challenges for societal security

<https://www.msb.se/en/Prevention/Strategic-Foresight/>

The Swedish model of government (www.government.se/sb/d/2858)

How public agencies are governed (www.government.se/sb/d/575/a/127133)

Protection and preparedness for accident (www.government.se/sb/d/12126/a/21967)

Emergency preparedness (www.government.se/sb/d/12126)

Who does what? (www.government.se/sb/d/12127)

The national level- the Riksdag and Government (www.government.se/sb/d/2858/a/16192)

Crisis Management in the Swedish Government Office (www.government.se/sb/d/12126/a/89625)

The regional level (www.government.se/sb/d/2858/a/16193)

The local level (www.government.se/sb/d/2858/a/16196)

Local authorities (www.government.se/sb/d/2102/a/20611)

Crises and emergency management in Värmland (www.lansstyrelsen.se/varmland/En/manniska-och-samhalle/krisberedskap/)

The role of county councils and the region's

(www.skl.se/tjanster/englishpages/municipalitiescountycouncilsandregions)

The role of the municipalities

(www.skl.se/tjanster/englishpages/municipalitiescountycouncilsandregions/theroleofthemunicipalities)

National Guidelines for managing societal disruption, ISBN: 978-91-7383-507-7

Expert interviews

5 different interviews with MSB experts (Swedish Civil Contingencies Agency)



Driving Innovation in Crisis Management for **E**uropean **R**esilience

UNITED KINGDOM

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response

Responsible Partner: CIES (Ben Hayes)



PREPARING FOR EMERGENCIES
WHAT YOU NEED TO KNOW

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by MSB and amended according to reviewer's comments and recommendations.

Overview

Crisis management in the UK has grown and matured considerably over the last fifteen years, galvanised in part by the 9/11 terrorist attacks and 7 July 2005 London bombings which served to catapult the field up the political agenda.

The UK's approach to crisis management is founded on Integrated Emergency Management (IEM), a holistic approach to preventing and managing emergencies that entails six key steps: anticipation; assessment; prevention; preparation; response; and recovery.

IEM advocates a bottom-up approach, with operations managed and decisions made at the lowest appropriate level. Preparation, response and recovery should be undertaken as an extension of a local responder's normal day-to-day activities.

This principle underpins the Civil Contingencies Act 2004, which overhauled existing legislation to provide a single framework for civil protection. It divides local responders involved in crisis management into two categories. Category 1 organisations are "first responders" (emergency services, local authorities, NHS bodies etc.) and have substantial civil protection responsibilities including risk assessment, emergency planning, and warning and informing the public. Category 2 organisations are "co-operating bodies" (transport providers, utility companies etc.) that are involved in planning for and responding to emergencies that affect their sector.

Most emergencies in the UK are dealt with at local level, but if necessary the government's central response framework would be initiated. Cabinet Office Briefing Rooms (COBR) - comprised of ministers and senior officials from relevant UK government departments and agencies - would be activated to provide overall strategic planning. Overall crisis management is typically supervised by one Lead Government Department (LGD) which works closely with the Cabinet Office's Civil Contingencies Secretariat, the principal governmental authority responsible for coordinating crisis management.

Crisis management in the UK is of a civilian nature with military involvement sought only in extreme cases. Volunteer organisations play an important role in augmenting capabilities and are involved in Category 1 responder training exercises. There is minimal evidence of significant private sector involvement in crisis management in the UK, with ad hoc agreements signed as necessary when emergencies occur.

It is difficult to calculate the amount of money allocated for crisis management in the UK because budget issues are not centrally managed by the government. Funding streams are often diverse and there is significant variation in resources between counties. What is clear is that funding has increased since the 7 July 2005 London bombings. Local authorities are generally responsible for financing emergency preparedness, though may apply to the government for financial support in bearing the costs of emergency response and recovery.

It is uncommon for the UK to cooperate bilaterally with other countries; instead the UK participates in intergovernmental organisations and a limited number of multilateral frames of cooperation in crisis management, such as the EU Civil Protection Mechanism. The UK rarely seeks help from other countries to manage internal emergencies, but is at the forefront of political initiatives in the EU context and is active in EU and NATO training and expert exchange programmes.

The Foreign and Commonwealth Office is responsible for managing the UK's relationship with other countries through its network of embassies and High Commissions, as well as the UK's overall relationship with international organisations such as the UN, NATO and the EU. However, the Civil Contingencies Secretariat is responsible for liaising with the civil emergency response and mutual aid systems of the EU and NATO. Government departments can also have bilateral relationships with specific international or multilateral institutions that will be used when appropriate.

Table of Contents

UNITED KINGDOM Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1574
Overview	1575
Table of Contents	1577
List of Figures	1579
List of Tables.....	1579
List of Abbreviations.....	1580
1 Policy	1581
1.1 Risk Assessment.....	1581
1.2 Policy and Governance	1586
1.2.1 Strategy scope and focus	1590
1.2.2 Monitoring and analytical support to policy making; R&D	1590
1.2.3 Policy for Prevention	1593
1.2.4 Policy for Preparedness	1594
1.2.5 Policy for Response	1595
1.2.6 Policy for Relief and Recovery	1595
1.3 Financing	1597
1.3.1 Investing in preparedness	1597
1.3.2 Investing in consequence management	1599
1.4 Policy review, Evaluation & Organisational Learning	1599
1.5 Resilience	1603
1.6 Information sharing and data protection	1606
2 Legislation	1608
2.1 Crisis (emergency, disaster) management concept.....	1608
2.2 General crisis (emergency, disaster) management law.....	1608
2.3 Emergency rule	1610
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1611
2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1612
2.6 Legal regulations on the involvement of volunteers and specialised NGOs	1615
2.7 Legal regulations for international engagements of first responders and crisis managers	1616

3	Organisation	1617
3.1	Organisational chart.....	1617
3.2	Organisational cooperation	1625
4	Procedures	1629
4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1629
4.2	Operations planning	1629
4.3	Logistics support in crises	1630
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1632
5	Capabilities	1637
5.1	Human resources	1637
5.2	Materiel (non-financial) resources	1638
5.3	Training	1639
5.4	Procurement	1642
5.5	Niche capabilities	1643
	Resources	1645
	Legislative acts	1645
	Official documents (white papers, strategies, etc.)	1645
	Online resources (e.g. websites of key CM organizations)	1647
	Publications	1648

List of Figures

<i>Figure 1: NRR Risk Matrix: Risks of terrorist and other malicious attacks</i>	<i>1583</i>
<i>Figure 2: NRR Risk Matrix: Other risks</i>	<i>1584</i>
<i>Figure 3: Integrated Emergency Management cycle</i>	<i>1588</i>
<i>Figure 4: Recovery structures and organisations</i>	<i>1596</i>
<i>Figure 5: the BCM lifecycle</i>	<i>1605</i>
<i>Figure 6: Linking local with central government</i>	<i>1617</i>
<i>Figure 7: Likely form of central government engagement based on the impact and geographic spread of an emergency in England</i>	<i>1621</i>
<i>Figure 8: Structure of Cabinet Office Briefing Rooms</i>	<i>1622</i>
<i>Figure 9: SAGE Governance structures</i>	<i>1624</i>
<i>Figure 10: Default SAGE, STAC interaction model</i>	<i>1625</i>
<i>Figure 11: Public communications timeline: what responders' plans need to achieve</i>	<i>1634</i>

List of Tables

<i>Table 1: Major civil security crises in the UK for the period 2000-2012</i>	<i>1585</i>
<i>Table 2: The role of scientific and technical advice in crisis management</i>	<i>1592</i>
<i>Table 3: Eurostat Indicators of government expenditures 2007-2011</i>	<i>1598</i>

List of Abbreviations

BCM	Business Continuity Management
CCA	Civil Contingencies Act 2004
COBR	Cabinet Office Briefing Rooms
CPM	Civil Protection Mechanism
CCS	Civil Contingencies Secretariat
DCLG RED	Department for Communities and Local Government Resilience and Emergencies Division
EU	European Union
FCO	Foreign and Commonwealth Office
G8	Group of Eight
IEM	Integrated Emergency Management
LGD	Lead Government Department
LRF	Local Resilience Forum
MACA	Military Aid to the Civil Authority
MoD	Ministry of Defence
NATO	North Atlantic Treaty Organisation
NCC	News Co-ordination Centre
NGO	Non-Governmental Organisation
NHS	National Health Service
NOS	National Occupation Standards
NRA	National Risk Assessment
NRR	National Risk Register
RCG	Recovery Co-ordinating Group
SAG	Scientific Advisory Group
SAGE	Scientific Advisory Group for Emergencies
SARS	Severe Acute Respiratory Syndrome
SCG	Strategic Co-ordinating Group
STAC	Science and Technical Advisory Cell
UK	United Kingdom
UN	United Nations
WCCC	Wales Civil Contingencies Committee

1 Policy

1.1 Risk Assessment

Central government

The UK government conducts a National Risk Assessment (NRA) to monitor the most significant emergencies the UK could face in the next five years. This confidential assessment is conducted each year and utilises the expertise of a wide range of departments and agencies of government. It focuses on three broad categories of risk: natural events, major accidents and malicious attacks.

The National Risk Register (NRR) is the public version of the NRA. It was first published by the government in 2008, fulfilling a commitment made in the National Security Strategy, and last updated in July 2013. It was created to provide businesses and the public with information regarding how they should prepare for civil emergencies. Cabinet Office guidance published in February 2013 states that the government is conducting a review of the NRR in consultation with risk communication experts to improve these guidelines.²¹⁵⁰

The risks posed to national security and human welfare by longer-term trends, such as technological advances and climate change, is considered by the classified National Security Risk Assessment, which informs the UK's National Security Strategy.

Local government

Different geographical areas of the UK face different risks. A person's likelihood of exposure to emergencies such as coastal flooding, industrial accidents or terrorist attack is obviously heavily dependent on where in the country they live. For that reason the government provides guidance on how to interpret the NRA and NRR to Local Resilience Forums, *the principal mechanism for local multi-agency cooperation (LRFs, see section 3.1)*, so that they can produce specific risk assessments that reflect the unique characteristics of their surrounding area.

The Civil Contingencies Act also requires emergency responders in England and Wales to maintain a public Community Risk Register. These are approved and published by LRFs and made available on local council websites.

Key risks and areas of concern

The NRA estimates the likelihood of different emergencies, typically using a mixture of data (including historical analysis and numeric modelling) and scientific expertise. The likelihood of terrorist or other malicious attacks is assessed more subjectively, with assessments focusing on the

²¹⁵⁰ Cabinet Office website: <https://www.gov.uk/risk-assessment-how-the-risk-of-emergencies-in-the-uk-is-assessed>

willingness and capabilities of those who might wish to carry out an attack, and the vulnerability of potential targets.

The NRR lists the highest priority risks (based on both likelihood and impact) facing the UK as: pandemic influenza, coastal flooding, catastrophic terrorist attacks, and severe effusive (gas-rich) volcanic eruptions abroad.

Other, less severe, risks include inland flooding, new and emerging infectious diseases, severe weather, severe space weather, wildfires, explosive volcanic eruption styles emitting mainly ash, animal diseases, major industrial and transport accidents, disruptive industrial action, malicious attacks and public disorder.

Pandemic Influenza

Pandemic influenza is considered by the government to be the most significant civil emergency risk facing the UK. The 2009 H1N1 influenza pandemic did not match the severity of the scenario the government plans for, and has no bearing on the probability of another, potentially more severe, pandemic occurring in the future. The three pandemics of the previous century (1918-19, 1957-58 and 1968-69) were all more deadly than the 2009 outbreak. The NRR anticipates that a severe pandemic could cause hundreds of thousands of deaths in the UK and would result in widespread social and economic disruption; significant threats to the continuity of essential services; lower production levels; shortages; and distribution difficulties.

Coastal flooding

The most severe example of coastal flooding occurred in 1953 – the last occasion a national emergency was formally declared in the UK – when a combination of high tides, a major tidal surge and onshore gale force winds devastated the east coast of England. While investment in coastal flood defences has reduced the risk of a similarly severe emergency occurring, the number of people living and working in east coast flood risk areas has increased, as has the range of critical infrastructure. The NRR warns that the impacts of overtopping and breaching of flood defences could be more serious than in 1953.

Catastrophic terrorist attacks

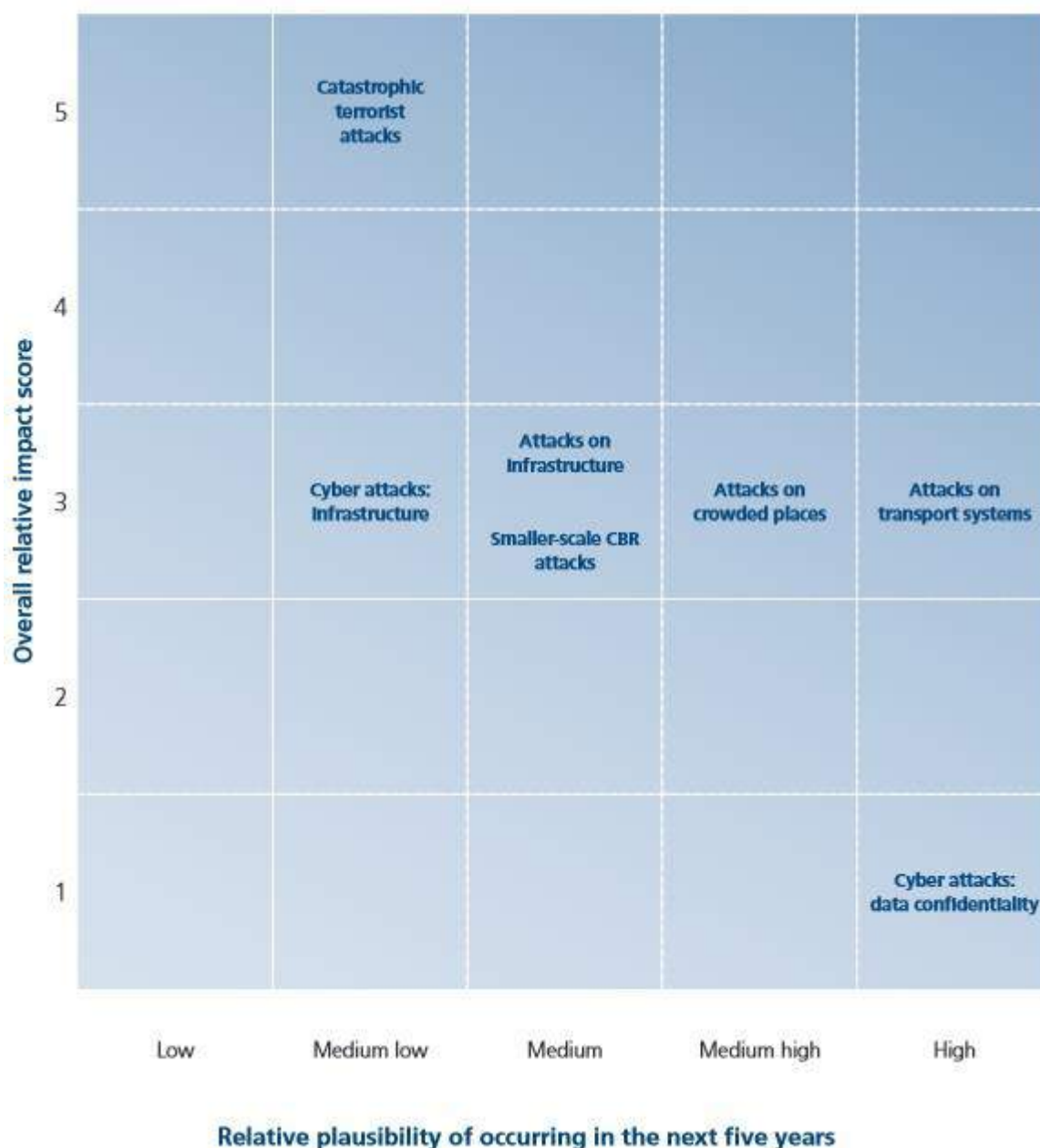
The NRR stresses that while major-impact terrorist attacks such as 9/11 are unlikely, they cannot be ruled out. The likelihood of terrorists obtaining effective mass impact biological agents or a functioning nuclear device is low, but not negligible. Accordingly, CONTEST, the Government's counter- terrorism strategy, is tasked both with stopping terrorists gaining access to the expertise and materials they need to deliver catastrophic attacks, and with preparing for the consequences should they succeed.

Severe effusive (gas-rich) volcanic eruptions abroad

The 2010 eruption of the Eyjafjallajökull volcano in Iceland highlighted the disruptive consequences of a volcanic eruption abroad. Ash-emitting eruptions of this type remain a concern, but the NRA and NRR are significantly more concerned by the prospect of a major effusive volcanic eruption, which

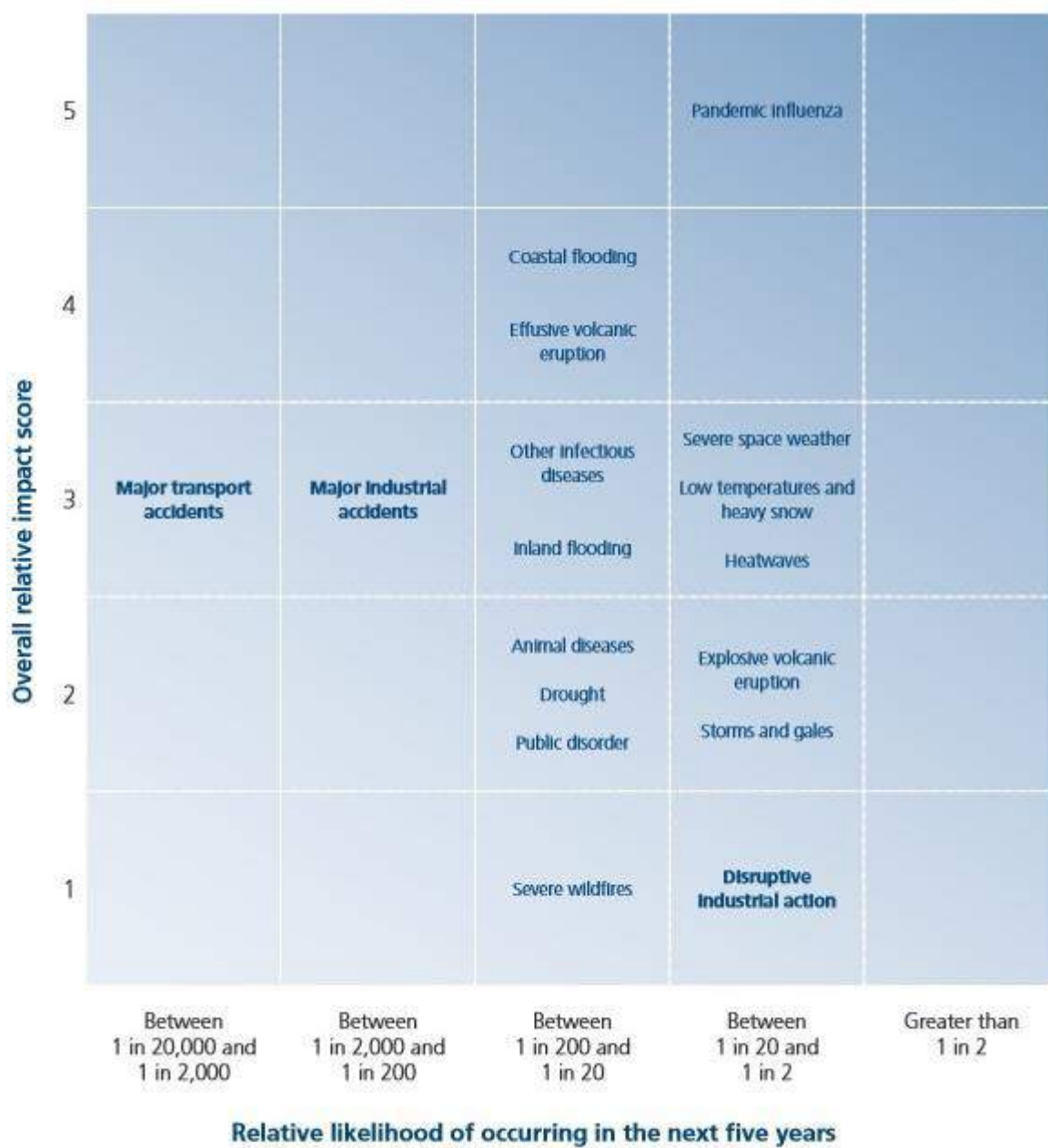
could emit large volumes of gases into the atmosphere over months or years, and the widespread impact on health, agriculture and transport this would have. The 1783-84 Laki eruption from Grimsvötn volcano in Iceland is the best understood example of this type of eruption, in which significant levels of sulphur dioxide, chlorine and fluorine were released. The effect was visible pollution across the UK and Northern Europe, mass crop failure and excess deaths, with the mortality rate in England for summer 1783 10-20% above average.

Figure 51: NRR Risk Matrix: Risks of terrorist and other malicious attacks



Source: National Risk Register of Civil Emergencies 2013 edition

Figure 52: NRR Risk Matrix: Other risks



Source: National Risk Register of Civil Emergencies 2013 edition

Table 35: Major civil security crises in the UK for the period 2000-2012

Date	Crisis description	Crisis category	Persons Killed	Persons injured	Persons affected
October 2000	Storm	Natural disaster	12		19,504
February 2001	Foot-and-mouth disease	Pandemics/infectious diseases			Whole society
February 2001	Transport accident	Industrial/transportation	13		70
July 2003	Extreme temperature	Natural disaster	301		
January 2004	Miscellaneous accident	Industrial/transportation	14		
November 2004	Transport accident	Industrial/transportation			150
January 2005	Storm	Natural disaster			3,000
December 2005	Buncefield depot explosion	Industrial/transportation			Not easily estimated
July 2005	London bombings	Terrorist attack	56	770	
January 2007	Storm	Natural disaster	13		
April 2007	Earthquake	Natural disaster			4,501
June 2007	Flood	Natural disaster			30,000
July 2007	Flood	Natural disaster			340,000
September 2008	Flood	Natural disaster			3,000
April 2009	Transport accident	Industrial/transportation	16		
May 2009	Swine Flu pandemic	Pandemics/infectious diseases	362		
November 2009	Flood	Natural disaster			3,900
April 2010	Volcanic Ash Cloud	Natural disaster/Critical infrastructure failure			Whole society

Source: ANVIL project country study: United Kingdom, February 2014

1.2 Policy and Governance

The UK's crisis management framework is premised on Integrated Emergency Management (IEM), a holistic approach to preventing and managing emergencies that entails six key steps: anticipation; assessment; prevention; preparation; response; and recovery. This section explains key terms, processes and principles.

Key terms

The terms 'emergency', 'response' and 'recovery' are used frequently in UK government guidance on crisis management. They are defined as follows:

Response

Response encompasses the decisions and actions taken to deal with the immediate effects of an emergency. It is the decisions and actions taken in accordance with the strategic, tactical and operational objectives defined by emergency responders. At a high level these will be to protect life, contain and mitigate the impacts of the emergency and create the conditions for a return to normality. In many scenarios it is likely to be relatively short and to last for a matter of hours or days – rapid implementation of arrangements for collaboration, co-ordination and communication are, therefore, vital. Response encompasses the effort to deal not only with the direct effects of the emergency itself (e.g. fighting fires, rescuing individuals) but also the indirect effects (e.g. disruption, media interest).²¹⁵¹

Recovery

In contrast, recovery may take months or even years to complete, as it seeks to support affected communities in the reconstruction of the physical infrastructure and restoration of emotional, social and physical well-being. The process of rebuilding, restoring and rehabilitating the community following an emergency or disaster, continues until the disruption has been rectified, demands on services have been returned to normal levels, and the needs of those affected have been met. Recovery is defined as the process of rebuilding, restoring and rehabilitating the community following an emergency. Although distinct from the response phase, recovery should be an integral part of the response from the very beginning, as actions taken during the response phase can influence the longer-term outcomes for a community.²¹⁵²

²¹⁵¹ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.10.

²¹⁵² Ibid.

Emergency

The Civil Contingencies Act 2004 establishes a coherent framework for civil security and civil protection in the UK. Part 1 defines an emergency as:

- *an event or situation which threatens serious damage to human welfare in a place in the UK;*
- *an event or situation which threatens serious damage to the environment of a place in the UK; or*
- *war, or terrorism, which threatens serious damage to the security of the UK.*²¹⁵³

The definition of ‘emergency’ is concerned with consequences, rather than the cause or source. Therefore, an emergency inside or outside the UK is covered by the definition, provided it has consequences inside UK territory (up to 12 nautical miles off the UK coast).

Government guidance uses the term emergency:

*...to encompass all challenges that require the use of assets beyond the scope of normal operations and require a special deployment. The term “major incident” is commonly used by emergency services personnel to describe events or situations which would constitute an emergency as defined in the CCA regime; this is the threshold of event or situation that will initiate a response under their major incident plans. These terms refer to the same threshold and are essentially interchangeable.*²¹⁵⁴

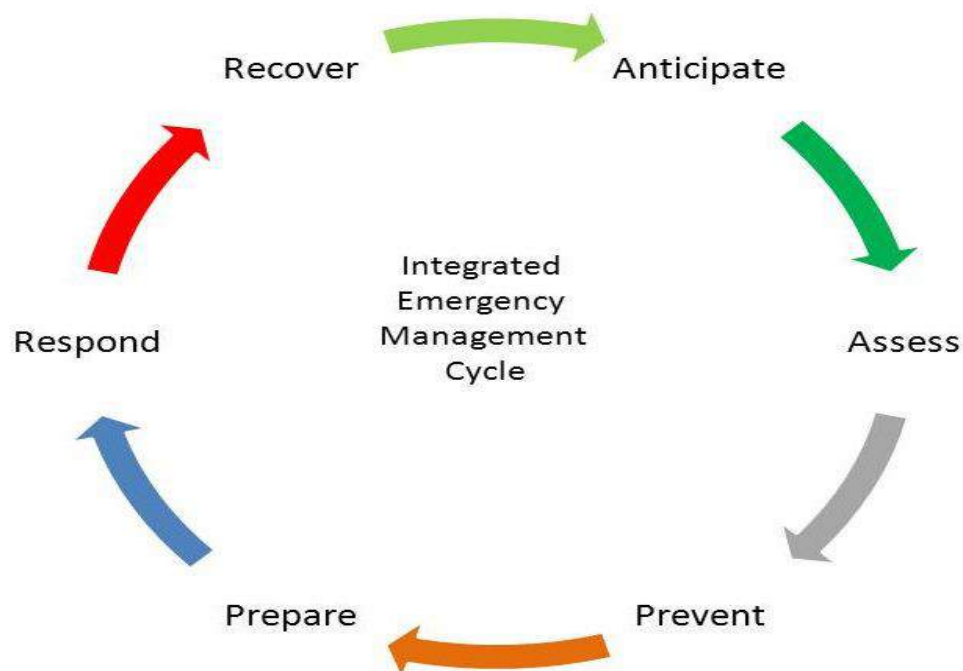
Integrated Emergency Management

The UK’s crisis management framework is founded on Integrated Emergency Management (IEM), a holistic approach to preventing and managing emergencies that entails six key steps: anticipation; assessment; prevention; preparation; response; and recovery.

²¹⁵³ Civil Contingencies Act 2004, Part 1, Article 1, Paragraph 1.

²¹⁵⁴ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.11.

Figure 53: Integrated Emergency Management cycle



The principles of IEM were agreed upon following a spate of emergencies in the late 1980s and early 1990s, which included the London King's Cross underground station fire, terrorist bombings, air crashes, oil rig explosions, floods, the 1987 hurricane, the sinking of the *Machioness* pleasure boat and the 1989 Hillsborough stadium disaster.

Under IEM, the preparation for, response to, and recovery from emergencies focuses on the consequences and wider impacts of events rather than their causes. IEM emphasises the development of flexible emergency plans that enable organisations to deal effectively with an incident, whether foreseen or unforeseen.

Principles of effective emergency response and recovery

Accordingly, while the UK government has published a common set of underlying principles to govern emergency response and recovery in the UK at all levels (both local and national), it emphasises that arrangements must be flexible and that these guidelines are “not intended to be prescriptive or an operations manual as there is no single approach that will meet the needs of every area, nor is there one single set of organisational arrangements that will be appropriate to each and every type of emergency.”²¹⁵⁵ Government guidance sets out eight principles to govern response and recovery efforts for every emergency in the UK:

Anticipation is crucial to both the pre-emergency and post-emergency phases. As with the first phase of the IEM process, it is important for organisations to actively ‘horizon-scan’ for risks and potential emergencies. During emergencies, it is important to anticipate the disparate direct and indirect impacts of emergencies may not be immediately apparent in high pressure, uncertain and demanding circumstances. Finally, an important aspect of anticipation is addressing recovery issues

²¹⁵⁵ Ibid. p. 8-9.

at the earliest possible opportunity, ensuring that the response and recovery effort is fully integrated.

Preparedness: All individuals and organisations that might play a part in the response and recovery effort should be appropriately prepared. They should have a clear understanding of their roles and responsibilities and how they fit into the wider, multi-agency picture.

Subsidiarity: The UK's approach to emergency response and recovery is founded on a bottom-up approach in which operations are managed and decisions are made at the lowest appropriate level. National and sub-national tiers often have little or no input and will become involved only when necessary.

Direction: During an emergency, those responsible for managing the response and recovery effort often face a plethora of competing demands and pressures. In some cases an array of organisations from across the public, private and voluntary sectors will be involved in responding to an emergency and their activities will need to be co-ordinated. It is therefore essential to establish clearly defined and unambiguous aims and objectives so as to create a shared set of priorities and focus resources. This is usually the responsibility of the Strategic Co-ordinating Group (SCG, see section 3.1).

Information: Maintaining the flow of information during an emergency (within organisations and also to partners and the general public) can be challenging but is crucially important to its successful resolution. The collation, assessment, verification, translation and dissemination of information should therefore be underpinned by appropriate information management systems. This will help decision-makers strike an appropriate balance between ensuring that decisions are well informed and acting swiftly and decisively. It will also help to furnish the public with appropriate advice, warnings and information to provide reassurance and a basis for any necessary action.

Integration: Responding and recovering from emergencies can involve multiple organisations and agencies from local, sub-national and national levels, each of which will have different roles and levels of involvement. It is therefore crucial that their contributions are integrated and clearly defined structures put in place to ensure that they combine and act as a coherent multi-agency group and are able to consult, agree and make decisions on key issues.

Co-operation: Emergency response and recovery brings together organisations with no formal or established relationship and it is therefore important to foster trust and understanding. Organisations must understand each other's functions, ways of working, priorities and constraints. Decision making should be inclusive and information sharing and openness encouraged.

Continuity: Emergency response and recovery should be grounded in tried and tested arrangements and established structures should be preserved as much as possible. Organisations working on a day-to-day basis in the relevant field have a large role to play because their experience, expertise and resources are invaluable.

1.2.1 Strategy scope and focus

The principles of IEM used to formulate the UK's strategic approach to crisis management recognise the importance of emergency prevention, preparedness, response, and recovery. This is reflected in the Civil Contingencies Act, which obliges local responders to have emergency plans in place for each of these phases.

The government has been criticised, however, for focussing insufficiently on the prevention and preparedness phases of emergency planning. Britain's level of participation in major EU and NATO exercises has been criticised in the past by the House of Lords European Union Select Committee as "unacceptably low" (see section 3.2). While in March 2011, the House of Commons Science and Technology Select Committee highlighted the volcanic ash emergency of April 2010 as "a clear example of how a lack of risk assessment and preparation can hamper the emergency response".²¹⁵⁶

The May 2013 peer review of the UK's implantation of the Hyogo Framework for Action - a ten-year guideline to reduce vulnerabilities to natural hazards - argued that the UK should strengthen both emergency prevention and preparedness: "A new momentum should enlarge the focus of the UK resilience approach from emergency preparedness and response towards more prevention and vulnerability reduction"²¹⁵⁷ (see section 1.2.3).

1.2.2 Monitoring and analytical support to policy making; R&D

When conducting risk assessment the government may elect to seek scientific expertise, both from internal and external experts. A combination of this advice, expert judgement and historical and statistical data can then be used to estimate the approximate likelihood of an emergency occurring (see section 1.1). Local responders and LRFs can also use local experts to help meet their CCA responsibilities to conduct risk assessment.

In the emergency planning phase, LGDs and the Devolved Administrations can use Science Advisory Groups (departmental or national led scientific or technical advisory groups focused on or used to inform emergency management) to commission new research and draw on a range of experts to ensure that their preparation is informed by science. As of 2011, every individual government department has a departmental Chief Scientific Adviser. They sit on the Chief Scientific Adviser's Committee, along with the Government's Chief Scientific Advisor (the personal adviser on science and technology-related activities and policies to the Prime Minister and the Cabinet; and head of the Government Office for Science).

SAGE can review and validate existing research and identify areas where new research should be commissioned. Cabinet Office *Enhanced Sage Guidance* states:

To ensure quality advice that can be provided in a timely fashion, the aim should be to avoid this situation by formulating scientific and technical advice during the planning phase. The

²¹⁵⁶ House of Commons Science and Technology Committee Report: Scientific advice and evidence in emergencies, March 2011, p.73: <http://www.publications.parliament.uk/pa/cm201011/cmselect/cmsctech/498/498.pdf>

²¹⁵⁷ Building resilience to disasters: Assessing the implementation of the Hyogo Framework for Action (2005-2015): Peer review report United Kingdom, May 2013, p.12. http://www.unisdr.org/files/32996_32996hfaukpeerreview20131.pdf

*commissioning of new research will need to be considered and authorised by the relevant department which will take in to account the provision of funds.*²¹⁵⁸

The guidance also suggests that it is good practice for all scientific and technical advice to be frequently reviewed in order to reflect the latest evidence and lessons learned. *“Where possible advice provided during an emergency should build - upon advice, evidence and research formulated during the risk assessment, planning and preparation phases and should be reviewed and incorporated into plans and guidance following the emergency.”*²¹⁵⁹

However, the government has been criticised in recent years for failing to utilise scientific expertise in the preparation phase of emergencies. In March 2011, the House of Commons Science and Technology Select Committee published a report titled *Scientific advice and evidence in emergencies* which stated: *“we are concerned that the Government's attitude to scientific advice is that it is something to reach for once an emergency happens, not a key factor for consideration from the start of the process. We conclude that scientific advice and an evidence-based approach must be better integrated into risk assessment and policy processes early on.”*²¹⁶⁰

²¹⁵⁸ Cabinet Office Enhanced SAGE Guidance, October 2012, p.12.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/80087/sage-guidance.pdf

²¹⁵⁹ Ibid. p.5.

²¹⁶⁰ House of Commons Science and Technology Committee Report: Scientific advice and evidence in emergencies, March 2011, p.81: <http://www.publications.parliament.uk/pa/cm201011/cmselect/cmsctech/498/498.pdf>

Table 36: The role of scientific and technical advice in crisis management

Emergency management phase / level of decision making	UK Cross Government (i.e. level 2 and 3 emergencies)	Devolved Administration only and Departmental (i.e. Level 1 emergencies)	Local
Risk identification	Coordinated by: the Risk Assessment Steering Group. Informed by: SAGs and external experts	Coordinated by: Government departments and Devolved Administrations. Lead departments to identify and establish a network of scientific and technical contacts for particular emergencies.	Coordinated by: Local Resilience coordination mechanisms Informed by: the Local Risk Assessment Guidance (LRAG), the National Risk Register (NRR) and local experts / responders.
Risk Assessment			
Contingency building / planning	Coordinated by: the National Capability Programme and departmental led planning programmes coordinate cross-government planning. Lead departments to identify and establish a network of scientific and technical contacts for particular emergencies. Informed by: SAGs and external experts.	Informed by: Scientific Advisory Groups (SAGs) and external experts, as appropriate.	Coordinated by: Local Resilience coordination mechanisms Informed by: Local risk assessments
Response and recovery	Scientific Advisory Group for Emergencies (SAGE) OR advice from individual experts, as appropriate.		Scientific and Technical Advise Cells (STACs) OR advice from individual experts, as appropriate.

Source: Cabinet Office Enhanced SAGE Guidance, October 2012

In terms of scientific support for other Crisis Management policy areas, the UK Economic and Social Research Council has funded academic research into various topics related to emergency prevention, preparedness, response, and recovery. This includes topics such as “Detecting Terrorist activity”,

“Enhancing resilience across all aspects of national infrastructure”, “Global Uncertainties” and “Ritual, community and conflict”.²¹⁶¹

1.2.3 Policy for Prevention

Like most facets of the UK’s crisis management framework, emergency prevention is grounded on the day-to-day work of local responder organisations. The CCA requires Category 1 responders to maintain plans for preventing emergencies. This refers primarily to the sort of prevention possible during the short period of time before an emergency occurs when it might be averted by prompt or decisive action. CCA statutory guidance states:

“Plans should be maintained for the purpose of ensuring that if an emergency is likely to occur, the organisation can perform its functions to prevent the emergency...emergencies under this aspect of the Act should be ‘nipped in the bud’ in the way that fire-fighters stop a fire from spreading.”²¹⁶²

The other form of prevention included in the CCA is that based on pre-emptive actions, such as the emergency services’ decision to mobilise proactively on New Year’s Eve to deal with potential incidents. Public health organisations immunising the public against the spread of influenza is cited as another example of emergency prevention. The CCA does not impose a duty on Category 1 responders to prevent all emergencies, nor does it oblige organisations to undertake remedial works which might prevent future emergencies.

The May 2013 peer review of the UK’s implantation of the Hyogo Framework for Action identified areas for improvement in the current crisis management framework’s capacity to prevent emergencies. The report advised that “additional dissemination of information to the public would help to strengthen not only preparedness but also prevention”²¹⁶³ and proposed that:

A new momentum should enlarge the focus of the UK resilience approach from emergency preparedness and response towards more prevention and vulnerability reduction. In particular, risks with potentially large impacts and high likelihoods, especially when these are growing, could be better managed through vulnerability reduction than through preparing and responding to the event. Floods and droughts are examples of the types of risks that may require more long-term, whole-of-society approaches to their reduction, as climate change may have an impact on those in the future.”²¹⁶⁴

²¹⁶¹ Economic and Social Research Council website: <http://www.esrc.ac.uk/research/major-investments/security-conflict.aspx>

²¹⁶² Emergency Preparedness, statutory guidance to Part 1 of the Civil Contingencies Act: Chapter 5 (Emergency Planning), October 2011, p.4.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61028/Emergency_Preparedness_chapter5_amends_21112011.pdf

²¹⁶³ Building resilience to disasters: Assessing the implementation of the Hyogo Framework for Action (2005-2015): Peer review report United Kingdom, May 2013, p.12. http://www.unisdr.org/files/32996_32996hfaukpeerreview20131.pdf

²¹⁶⁴ Ibid.

1.2.4 Policy for Preparedness

The UK's crisis management framework emphasises local preparedness. Category 1 responders have comprehensive emergency planning duties under the CCA. They are required to: conduct risk assessment (through the Community Risk Register); formulate emergency plans and business continuity plans; regularly test the effectiveness of these plans through exercises; train key staff and the staff of appropriate voluntary organisations; and provide the public with information on the risks posed by emergencies. Local communities are also encouraged to make plans for emergencies that complement the role of the emergency services as part of community resilience.

The Cabinet Office's Civil Contingencies Secretariat (CCS), the principal governmental authority responsible for coordinating crisis management, has overall responsibility for ensuring emergency preparedness at both national and local level and manages the National Resilience Capabilities Programme (see section 1.5). It is tasked with improving government systems "for identifying new challenges, for assessing risks, for anticipating, planning, preparing and exercising for crises, for building up our resilience to them, and for systematically applying the lessons learned from particular incidents."²¹⁶⁵ The core function of the CCS is to enhance UK resilience by bolstering the national capacity and capability to deal with emergencies. It works in close partnership with government departments to:

- *enable and protect their own decision takers;*
- *develop their own early warning systems;*
- *prepare plans against various eventualities and make sure those plans are properly integrated with those of other departments and agencies;*
- *identify the training and exercises needed to test the plans and enable continuous improvements;*
- *build up the necessary management and professional expertise to maintain and activate the plans and to know where to turn for reinforcement and augmentation;*
- *learn, and share their learning, with other departments.*²¹⁶⁶

Government departments also have individual responsibilities for emergency planning, staff training and exercising, and may be the LGD for a National Resilience Capabilities Programme workstream.

²¹⁶⁵ The Role of the Lead Government Department in Planning for and Managing Crises, January 2011, p.3. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61356/lead-government-department-framework.pdf

²¹⁶⁶ Ibid. p.4.

1.2.5 Policy for Response

The UK's approach to emergency response and recovery is bottom-up, with operations managed and decisions made at the lowest appropriate level. Government guidance emphasises that “local agencies are the building blocks of response and recovery operations” and indeed, most emergencies are dealt with at local level with little or no input from sub-national or national levels.

*The role of central government and the devolved administrations is to support and supplement the efforts of local responders through the provision of resources and co-ordination. The central and sub-national tiers will only become involved in emergency response and recovery efforts where it is necessary or helpful to do so.*²¹⁶⁷

See section 3 for detailed information on the organisational arrangements of emergency response.

1.2.6 Policy for Relief and Recovery

Guidance

The CCS's non-statutory guidance to the CCA, *Emergency Response and Recovery*, details the multi-agency structures and processes that can be used during the recovery phase of an emergency. It emphasises that recovery is a complex, long running and resource intensive process that requires the involvement of many more agencies and participants than the response phase. The recovery phase should be based on tried and tested structures and procedures and begins at the earliest possible opportunity, operating in tandem with the response phase to an emergency.

National Recovery Guidance aimed primarily at local responders was produced by the Cabinet Office's National Recovery Working Group in 2007. Updated frequently with recent case studies and new best practice policy, the guidance is developed in accordance with the CCA and contains topic sheets on a wide range of recovery issues, a recovery plan guidance template, and over 100 case studies from incidents and exercises.

Policy

Emergency Response and Recovery identifies recovery support as an enabling and supportive process designed to assist affected communities towards management of their own recoveries. It is most effective when conducted at the local level with the active participation of the private sector, the voluntary sector and the wider community. The Cabinet Office outlines four interlinked categories of impact that individuals and communities will need to recover from: environmental; economic; infrastructure; and humanitarian assistance (including health needs). Recovery capability, planning and training, is built around these four key themes.

²¹⁶⁷ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.18.

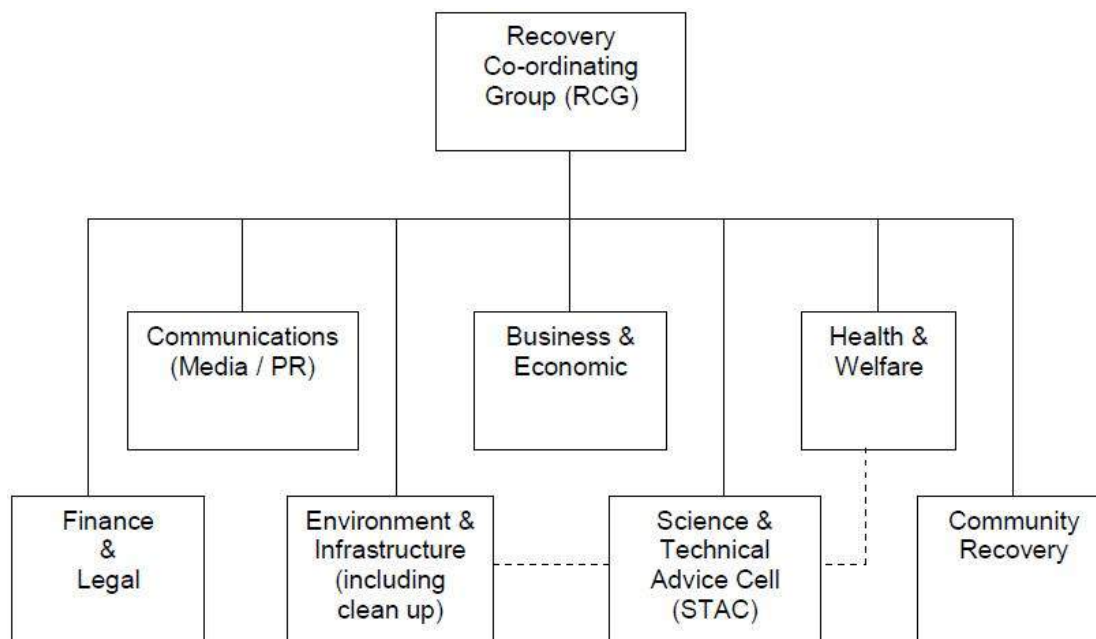
Organisational roles and responsibilities at local level

Local authorities are responsible for planning for the recovery of communities in the aftermath of emergencies. Government guidance recommends that a Recovery Co-ordinating Group (RCG) be set up by a local authority on the first day of an emergency to run in parallel with the SCG. The RCG is principally responsible for developing a recovery strategy and will report to the SCG. When the initial crisis response is complete, responsibility for coordinating the recovery phase will be passed from the SCG to the RCG at a formal meeting.

Local authorities are responsible for planning for the recovery of communities in the aftermath of emergencies. A local authority will usually chair and provide the secretariat for the RCG, coordinating the multi-agency response with help from Category 1 and 2 responders, voluntary organisations and any other relevant agencies via the LRF. Government guidance states that the size and organisation of an RCG varies according to the practicalities of each emergency, but suggests the structure shown in Figure 4.

Neighbouring local authorities are required to have organisational arrangements in place setting out how the recovery response will be coordinated for emergencies that cross local authority boundaries. Typically a single RCG will be created with a designated lead local authority acting as chair. Similarly, if an emergency crosses LRF boundaries guidance recommends that a Multi-LRF RCG be created to ensure “consistency of approach, reducing duplication of effort, minimising the burden on responders, and facilitating the sharing of information, support and mutual aid.”²¹⁶⁸ As with all crisis management arrangements in the UK, the RCG would observe the principle of subsidiarity whereby all recovery related decisions would be taken at the lowest possible level.

Figure 54: Recovery structures and organisations



Source: *Emergency Response and Recovery*, non-statutory guidance accompanying the Civil Contingencies Act 2004

²¹⁶⁸ Ibid. p.91.

Organisational roles and responsibilities at national level

If the Cabinet Office agrees that ongoing national support is required, a formal handover will take place between the LGD for response and the LGD for recovery. The same department may retain responsibility for both phases, but often the evolving nature of the challenge, the different issues that arise and the expertise required mean that a different department is better situated to lead the recovery phase. In emergencies that effect wide geographical areas it is possible that response and recovery activity will be occurring simultaneously in different parts of the country under the leadership of two different LGDs. Consideration can also be given for the establishment of Ministerial cross-departmental Recovery Group. As with crisis response, a Department for Communities and Local Government's Resilience and Emergencies Division or LGD liaison officer(s) will act as the main point of contact between local responders and central government.

When an emergency has occurred in, or affected, a devolved administration and the UK government has retained responsibility for leading the emergency response, the Cabinet Office and the LGD will agree with the affected devolved administrations how the recovery process should be managed.

1.3 Financing

1.3.1 Investing in preparedness

The government operates The Bellwin Scheme of Emergency Financial Assistance to Local Authorities to provide financial assistance for the costs incurred during the response phase of an emergency. Any local authority can claim under the scheme if they incur expenditure in the course of responding to an emergency that involved the destruction of or danger to life and property.²¹⁶⁹ Enhancements were made to the scheme in 2014 "to reflect the exceptional nature of recent storms and the role councils play as first responders". Bellwin grants are now paid at 100 percent above threshold instead of 85 percent.²¹⁷⁰

The Bellwin scheme applies only to the response phase, with local authorities generally responsible for financing emergency preparedness themselves. The same is true for LRFs which are not fully staffed or supported by a secure funding stream, and in most cases must rely on a voluntary subscription scheme from its members if it is to appointment a full-time coordinator or manager (as CCA statutory guidance suggests).

With regard to total UK funding for emergency preparedness and response, the ANVIL study, an EU co-funded security research project, found that:

British policy-makers certainly agree upon one thing: that it is extremely difficult to calculate the exact amount of money allocated for civil security in the UK. None of the interviewees of

²¹⁶⁹ Full details of how the scheme works are available on the Department for Communities and Local Government website: <https://www.gov.uk/government/publications/bellwin-scheme-2013-to-2014-guidance>

²¹⁷⁰ Department for Communities and Local Government, Flood Support Schemes - Funding available from central government, March 2014, p.8. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312180/Summary_of_Support_Guide.pdf

the present study has presented us with a clear answer on this matter. This is mainly because budget issues on civil security are not centrally managed by the government. In each county, there is a certain amount allocated by the local authorities for crisis management and risk assessment. Apart from that, each category 1 responder can have funds coming from the government department to which they belong (for instance the police can be aided by the Home Office). This also means that funds for civil security may not come exclusively from the Home Office; for example, the Ministry of Defence sponsors 'Search and Rescue' (SAR) operations, which can be conducted not only abroad but also in the homeland. Last but not least, emergency services at the local level may be distinct legal entities with the ability to impose local taxation, a portion of which can be dedicated to emergency preparedness and response. All these result in a rich variation of the available resources and of respective civil security capacities from county to county in the UK.²¹⁷¹

What is clear to the study is that after the 2005 London bombings, government counter-terrorism funding increased significantly, and that this spilled over to civil security issues. Increased funding led to the modernisation of civil security infrastructure, "always with a high emphasis on preventing a major civil crisis due to a terrorist attack".

Although not providing a breakdown of how resources are allocated between government departments, the ANVIL study cites national statistics for total government expenditure (expressed in GDP percentages) in fields associated with civil security as an indicator of total financing.

Table 37: Eurostat Indicators of government expenditures 2007-2011

Category of Expenditure	2007	2008	2009	2010	2011
Civil Defence	0	0	0	0	0
Public Order and Safety	2.5	2.7	2.8	2.7	2.6
Police Services	1.3	1.4	1.6	1.5	1.4
Fire-Protection Services	0.2	0.2	0.3	0.2	0.2
Environment Protection	1	0.9	1.1	1	1

Source: ANVIL project country study: United Kingdom, February 2014

²¹⁷¹ Evangelos Fanoulis, Emil Kirchner and Han Dorussen, "Country Study: United Kingdom" Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014), p.33. http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

1.3.2 Investing in consequence management

An independent review of 2007's exceptionally severe flooding, chaired by Sir Michael Pitt, reaffirmed local authorities' responsibility to make arrangements to bear the costs of the recovery phase in the majority of emergencies. Councils are responsible for conducting their own risk assessments and putting in place the right balance of insurance, self-insurance and reserves, to provide both security and value for money for their communities.

However, in response to the Pitt Review the government did put together, for the first time, a financial package to assist affected local authorities with the costs of recovery in the event of an "exceptional emergency". In such circumstances, individual government departments (namely the Department for Communities and Local Government, the Department for Education, the Department for Environment, Food and Rural Affairs, and the Department for Transport) will consider at ministerial level whether to provide financial support for aspects of the recovery effort.

Recovery phase funding can also be applied for under the EU Solidarity Fund which was established in 2002 to provide financial assistance in the aftermath of major natural disasters. To be eligible for funding total direct damage caused by the disaster must exceed 3.2 billion euros or 0.6% of the country's gross national income, whichever is the lower. The UK has benefitted from the fund once, when it was granted 162.3 million Euros to help with damage caused by the June 2007 floods.

If the armed forces are called on to support the response and/or recovery phases of an emergency, Treasury rules stipulate that the cost of this activity cannot come from the defence budget and instead must be recovered by the Ministry of Defence (MoD). The only exception is that where there is a direct threat to life, MoD Ministers may, at their discretion, decide it is in the national interest to waive part or all of the costs incurred for assistance provided in the response phase. When human life is not at risk, civil organisations will be required to meet all or some of the MoD's costs. In some cases the MoD is only prepared to provide niche capabilities on the understanding that other departments or agencies are prepared to fund all or part of the costs (see section 4.3). Military assistance in the recovery phase will be charged for at rates determined by the MoD.

1.4 Policy review, Evaluation & Organisational Learning

Debriefing

Cabinet Office CCA non-statutory guidance emphasises the importance of record-keeping during emergencies to facilitate operational debriefing and provide evidence to any enquiries that may later be held. Single-agency and inter-agency debriefing processes should therefore be in place to capture information while memories are fresh. All debriefs should be effectively chaired, preferably by someone who has not been involved in the emergency or exercise. A secretary should also be appointed to ensure a record of the discussion is produced.

There should also be a continual process for debriefs throughout the recovery phase to capture issues identified, recommendations to be implemented, and planning assumptions to be reviewed. It should identify issues from all partners involved in the recovery process and involve the local

community (including businesses) at all stages. However, there is no specific guidance on how to carry out recovery debriefs. Instead the non-statutory guidance makes a series of general recommendations for good practice based on the experiences of recent emergencies. It suggests that internal debriefs within each organisations should be held first, with findings then brought together in a multi-agency debrief (at the RCG or LRF). A strategy for canvassing public opinion should be developed and agreed upon. This might include the use of questionnaires, focus groups, websites and existing networks (community groups and parish councils for example). Any documents produced should be held for five years and a recovery debrief report released into the public domain in a timely fashion.

Lessons learned

In January 2011, the Cabinet Office published the policy paper *Lessons identified from UK exercises and operations: a policy framework* to formalise existing arrangements for identifying, acting upon and implementing lessons learned from emergency operations and training exercises. How well these lessons are incorporated into civil contingency policy is uncertain and it is perhaps telling that government guidance generally refers to ‘lessons identified’ rather than ‘lessons learned’ (see below).

The policy framework reaffirms the CCA’s requirement of Category 1 responders to “capture and assess lessons emerging from exercises and emergencies” and recommends a formal role for LRFs “in reviewing on a regular basis lessons emerging from significant emergencies and exercises in their area.”²¹⁷² Accordingly, lessons learned from debriefing processes can be collated and distributed in a multi-agency environment at local and regional forums such as an LRF or [Department for Communities and Local Government Resilience and Emergencies Division \(DCLG RED\)](#). Lessons learned that are relevant at a national level can be passed by a DCLG RED to the CCS in the Cabinet Office where subsequent action by government departments can be coordinated.

Where lessons learned would be of interest to other LRFs or responders in other parts of the country, they can be flagged by the DCLG RED or relevant devolved administration authority and disseminated via their networks. The Cabinet Office policy framework suggests that “for emergencies of national significance, a lessons learned workshop or conference should be organised by either the local or regional resilience forum, as appropriate, in order to share learning with other responders.”

For emergencies that require intervention by central government, *The Central Government Arrangements for Responding to an Emergency - Concept of Operations* requires LGDs to “account to Parliament and lead in the submission of evidence to any subsequent Government-appointed or independent inquiry” and to “identify, learn and share the lessons” from the planning, response and recovery stages of an emergency. Following an emergency the LGD is required to produce a post-incident report within three months of the end of the response phase and should consider publishing a separate report on lessons learned from the recovery phase of the emergency.

²¹⁷² Cabinet Office policy paper - Lessons identified from UK exercises and operations: a policy framework, November 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61349/lessons-learned-exercises-framework.pdf

Where lessons are identified, all government departments have a responsibility to consider how the defined areas of policy, planning and procedure for which they are responsible might be reviewed and revised accordingly.

The CCS has overall responsibility for lessons learned at government level and, according to the Cabinet Office policy framework, should facilitate an annual lessons learned seminar with national, regional and local stakeholders. The seminar is designed to “present key lessons from exercises and operations in an environment that will facilitate learning and ensure lessons identified are shared as widely as possible.”

The policy framework also requires the CCS to establish a system for collating “strategic or cross-cutting” lessons learned that have been submitted by individual government departments. The system should allocate responsibility to “act upon, investigate or clarify individual lessons” and ensure that it is implemented at national level (by amending LGD plans and procedures and the Central Government Concept of Operations for the response to an Emergency) and at local level (through informal guidance, amendment to statutory guidance and the revision of training courses).

Examples of Lessons learned

The Pitt Review of 2007’s exceptionally severe flooding published its final report in June 2008. In April 2010 the government passed the Flood and Water Management Act 2010, which implemented many of his recommendations including the introduction of a strategic overview role for the Environment Agency and a new leadership role for local authorities.²¹⁷³ His recommendation of greater oversight of flood risk plans by scrutiny committees was incorporated via the Local Democracy, Economic Development and Construction Act 2009, and was reaffirmed in the Localism Act 2011. The review also prompted considerable scrutiny of flood management plans at the local level, for example in Devon in 2009²¹⁷⁴, in South Staffordshire in 2010²¹⁷⁵, and in Gloucestershire in 2011.²¹⁷⁶ Each county produced their own review, the findings of which were implemented.

The Pitt Review also led, for the first time, to government financial aid to assist affected local authorities with the costs of recovering from emergencies (see section 1.3.2). Sector Resilience Plans for UK critical infrastructure were also introduced under Recommendation 51 of the Pitt Review (see section 1.5).

Lessons identified after the 7 July 2005 London bombings found that the effectiveness of emergency response had been undermined by the misinterpretation and overzealous application of the Data Protection Act 1998. Accordingly, in February 2007 the Cabinet Office published detailed non-statutory guidance titled *Data Protection and Sharing - Guidance for Emergency Planners and*

²¹⁷³ The UK government had implemented 43 of the Pitt Review’s 92 recommendations by January 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69489/2012-01-31-pb13705-pitt-review-progress.pdf

²¹⁷⁴ Devon County Council – Flooding in Devon, May 2009. http://www.devon.gov.uk/flooding_report_final.pdf

²¹⁷⁵ South Staffordshire Council - A Review of Emergency Planning in South Staffordshire District Council. <http://www.cfps.org.uk/domains/cfps.org.uk/local/media/library/reviewofemergencyplanning.pdf>

²¹⁷⁶ Gloucestershire County Council – Severn Estuary Scrutiny Task Group <http://glostext.gloucestershire.gov.uk/documents/s6082/A%20I%204%20Final%20report%20091211.pdf>

Responders to complement the CCA regime's existing statutory and non-statutory guidance for Category 1 and 2 responders.

Criticism

A November 2012 study by the National Institute for Health Research found flaws in the UK civil contingency system's capacity to transfer knowledge and experience and to implement lessons identified by debriefing processes. The study talked to 17 experts working in the field and found that:

*"From the interviews, a common and recurrent theme was concern voiced with regards to whether the emergency planning community learnt from emergencies. For example, not all events were reviewed. Where some reviews are conducted following emergency events, some debriefing may occur and lessons are identified. However, these do not always translate into enduring organisational change."*²¹⁷⁷

Further, when lessons were considered to have been learned "there was little evidence of these lessons being revisited later to confirm changes in organisational or individual behaviour."²¹⁷⁸ An emergency planning academic and technical expert interviewed by the study said:

"I was once interviewing an emergency planner as part of a panel for a job and he said, 'Lessons learned - we've dealt with all of them.' So I just looked at him and said, 'What do you mean you've learned the lesson?'
'Well we had an action plan.'
'But how do you know it was learned?'
'Well because we had an action plan.'
'No, how do you know that learning was embedded? How do you know that meant changed behaviour, changed attitudes, changed culture?'
*'Ah well, erm' is what you got from them. So I firmly believe if you talk about lessons learned you embed this feeling that you've actually learnt the lesson when actually all you've done is identify it."*²¹⁷⁹

Explanations given for this lack of reflecting learning included lack of time, competing organisation pressures and attempts to avoid blame for operational failures. The report identifies the need for a "professional culture shift towards a much more evidence-based approach to emergency management" in which international evidence could be integrated to fill gaps in local knowledge. Currently there is a "tendency to disregard knowledge from sources outside the UK as irrelevant to the local context. This view ignores a substantial body of knowledge on emergency planning from around the world, and in particular the United States."²¹⁸⁰

²¹⁷⁷ Andrew CK Lee et al. "Emergency Planning in Health: Scoping study of the international literature, local information resources and key stakeholders", National Institute for Health Research study. November 2012, p.76.

http://www.nets.nihr.ac.uk/data/assets/pdf_file/0017/85112/FR-09-1005-03.pdf

²¹⁷⁸ Ibid. p.156.

²¹⁷⁹ Ibid. p.78.

²¹⁸⁰ BMC Public Health 2012: "Emergency management in health: key issues and challenges in the UK", p.9. <http://www.biomedcentral.com/content/pdf/1471-2458-12-884.pdf>

1.5 Resilience

The government defines resilience as “the capacity of an individual, community or system to adapt in order to sustain an acceptable level of function, structure, and identity.”

The National Security Strategy states that one of the UK government’s key tasks is to improve the resilience of the infrastructure most critical to keeping the country running against attack, damage or destruction. Accordingly, Cabinet Office guidance promotes the building of a more resilient society that is better prepared for and more able to recover from emergencies. It emphasises the collective nature of this endeavour:

“This responsibility needs to be shared between central and local government and the emergency services, the private sector (particularly those providing essential services to the public), civil society and communities. Our efforts to improve our ability to prepare for, respond to, and recover from emergencies therefore go beyond those organisations with legal obligations in this area.”²¹⁸¹

The National Resilience Capabilities Programme is the core framework through which the government seeks to build resilience across all parts of the UK. It identifies challenges and monitors current levels of capability in policy areas covered by 22 different workstreams. A LGD is responsible for each workstream, with the CCS responsible for the overall management of the programme and oversight coming from the National Resilience Capabilities Programme Board and, ultimately, from the Ministerial Sub-Committee on Resilience, which is chaired by the Prime Minister. Each LGD must gather information available at local and national levels and assess the level of workstream capability, before reporting their findings to government ministers.

Infrastructure resilience

The Infrastructure and Corporate Resilience Programme was established in March 2011 under the remit of the CCS to enable public and private sector organisations to develop the resilience of their infrastructure, supply and distribution systems to disruption from all risks.

In October 2011 it published the guide *Keeping the country running: natural hazards and infrastructure* “to support infrastructure owners and operators, emergency responders, industry groups, regulators, and government departments to work together to improve the resilience of critical infrastructure and essential services”.²¹⁸²

Since 2009, the LGD sponsoring each infrastructure sector has been required to produce an annual Sector Resilience Plan, setting out the resilience of the UK’s most important infrastructure to the relevant risks identified in the NRA. The plans are then placed before ministers to alert them to any perceived vulnerabilities along with an action plan for improving resilience where necessary. Sector Resilience Plans were introduced under Recommendation 51 of the Pitt Review and “are now a key

²¹⁸¹ Cabinet Office website: <https://www.gov.uk/government/policies/improving-the-uks-ability-to-absorb-respond-to-and-recover-from-emergencies/supporting-pages/building-a-resilient-society>

²¹⁸² Cabinet Office guidance - Keeping the Country Running: Natural Hazards and Infrastructure, October 2011, p.5. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61342/natural-hazards-infrastructure.pdf

driver within Government to support and enable the continuous improvement in the resilience of critical infrastructure.”²¹⁸³ Individual plans are classified, but the Cabinet Office produces an annual summary of all departments’ plans into one overall sector resilience plan for critical infrastructure²¹⁸⁴:

- *In 2010, sector resilience plans focused on the resilience of the UK’s critical national infrastructure to flooding.*
- *In 2011, sector resilience plans extended the scope to allow assessment of other natural hazards and/or less critical assets.*
- *In 2012, sector resilience plans extended the scope to allow assessment of the sector’s most important infrastructure to all risks (hazards and threats)*

Community resilience

Community resilience involves “communities and individuals harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services”.²¹⁸⁵ Cabinet Office guidance proposes that by using local area risk assessments published by LRFs under the CCA to identify and plan for the risks posed by severe emergencies, communities can be better prepared, quicker to respond and in many cases better equipped to recover from an emergency. A community resilience programme has been in place since 2008 to support existing community initiatives, disseminate these successful activities in other areas and raise awareness and understanding of local emergency response capability.

The May 2013 peer review of the UK’s implantation of the Hyogo Framework for Action found that:

*Despite efforts by the Government to educate and provide detailed information, changing people’s behaviour and making individuals personally responsible remains a challenge: the culture of prevention and risk awareness is still seen as low (reportedly around 12 per cent among the general population).*²¹⁸⁶

Business Continuity Management

Business Continuity Management (BCM) involves identifying a business’s main products and services, along with the critical activities necessary to produce them, and devising strategies to ensure continuity of service in the event of disruption caused by an emergency, and for effective recovery afterwards. Guidance emphasises the vital role businesses play in assisting the public during and after an emergency.

The government aims for all businesses to have a clear understanding of how they can become more resilient under BCM and has produced a BCM Toolkit²¹⁸⁷ and a *Business Continuity Guide for*

²¹⁸³ Ibid. p.38.

²¹⁸⁴ Sector resilience plans for the last four years can be viewed here: <https://www.gov.uk/government/collections/sector-resilience-plans>

²¹⁸⁵ Civil Protection Lexicon 2010: www.cabinetoffice.gov.uk/cplexicon

²¹⁸⁶ Building resilience to disasters: Assessing the implementation of the Hyogo Framework for Action (2005-2015): Peer review report United Kingdom, May 2013, p.23. http://www.unisdr.org/files/32996_32996hfaukpeerreview20131.pdf

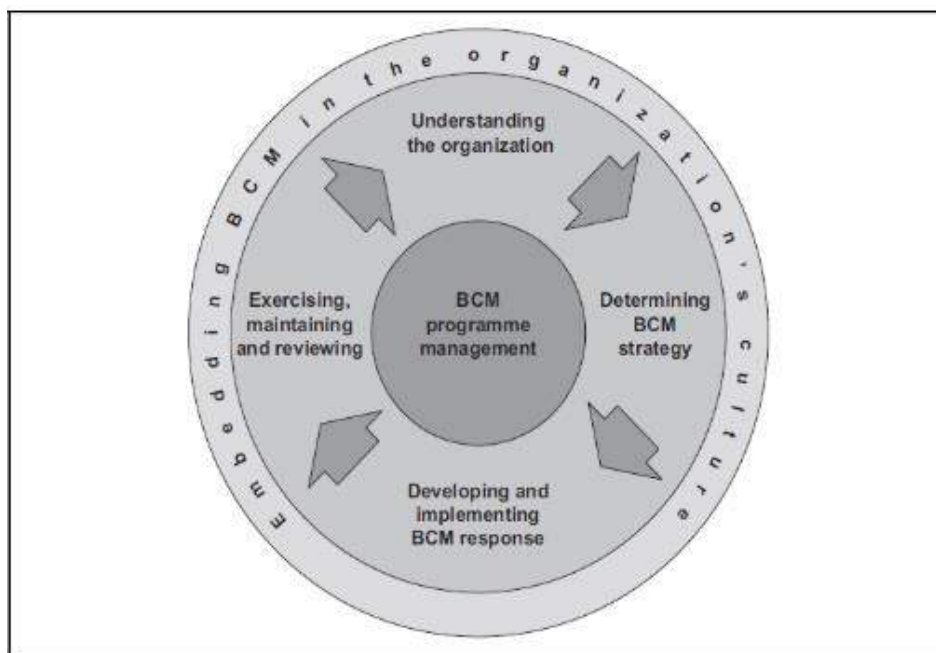
²¹⁸⁷ Business Continuity Management Toolkit:

Dummies, in partnership with the Business Continuity Institute and Emergency Planning Society.²¹⁸⁸ A Business Continuity Plan should be devised, frequently reviewed, and tested through regular exercises. The CCS's Corporate Resilience Strategy promotes effective but inexpensive ways for smaller businesses to implement BCM.

The CCA requires Category 1 responders to have Business Continuity Plans in place to ensure that they can continue to exercise all functions - not just those that relate to emergency planning - in the event of an emergency, so far as is reasonably practicable. The Act also requires local authorities to provide advice and assistance to businesses and voluntary organisations in relation to business continuity management - an integral part of the Act's wider contribution to building resilience in the UK.

The Business Continuity Management standard ISO 22301:2012 (*Societal security - Business continuity management systems - Requirements*) is widely acknowledged as industry best practice and provides a generic framework that is applicable across the public, private and voluntary sectors. It is supported by ISO 22313:2012 (*Societal security - Business continuity management systems – Guidance*) which provides pragmatic guidance concerning the implementation of BCM. The standards, or their equivalent in the water industry, the Security and Emergency Measures Direction (SEMD), establish the process, principles and terminology of BCM.

Figure 55: the BCM lifecycle



Source: Cabinet Office website

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/137994/Business_Continuity_Management_Toolkit.pdf

²¹⁸⁸ Business continuity guide for dummies sample chapter: <https://www.gov.uk/government/publications/business-continuity-guide-sample-chapter--2>

1.6 Information sharing and data protection

Category 1 and 2 responders have a duty under the CCA and Contingency Planning Regulations to share information with each other in order to aid emergency planning, response and recovery. CCA statutory guidance considers information sharing to be “a crucial element of civil protection work, underpinning all forms of co-operation.”²¹⁸⁹

*Information sharing is necessary so that Category 1 and 2 responders are able to make the right judgements. If Category 1 and 2 responders have access to all the information they need, they can make the right decisions about how to plan and what to plan for. If they do not have access to all the information, their planning will be weakened.*²¹⁹⁰

Guidance states that “the initial presumption is that all information should be shared”, but that Category 1 and 2 responders must, at all times, have regard for their responsibilities under relevant legislation, such as the Freedom of Information Act 2000 and the Data Protection Act 1998. This includes understanding what information should be controlled, how to obtain consent, how to categorise information, and what the limits of its disclosure are.

An appropriate level of understanding of these obligations was deemed to be lacking in the aftermath of the 7 July 2005 London bombings. The government’s lessons learned programme found that in some parts of the emergency response the requirements of the Data Protection Act were either “misinterpreted or over-zealously applied”.²¹⁹¹ Accordingly, in February 2007 the Cabinet Office published detailed non-statutory guidance titled *Data Protection and Sharing - Guidance for Emergency Planners and Responders* to complement the CCA regime’s existing statutory and non-statutory guidance for Category 1 and 2 responders.

During any emergency, Category 1 and 2 responders must balance the potential damage to the individual against the public interest in sharing the information. Inevitably the balance struck will depend on the specific nature of the emergency in question, and guidance notes that “in emergencies, the public interest consideration will generally be more significant than during day-to-day business.”²¹⁹²

The only circumstances in which the provisions of the Data Protection Act could be disregarded entirely would be through emergency regulations made under Part 2 of the CCA.

Social media

²¹⁸⁹ Emergency Preparedness, statutory guidance to Part 1 of the Civil Contingencies Act: Chapter 3 (Information Sharing), March 2012, p.4. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61026/Chapter-3-Formal-information-sharing-revised-March-2012.pdf

²¹⁹⁰ Ibid. p.5.

²¹⁹¹ Data Protection and Sharing – Guidance for Emergency Planners and Responders, February 2007, p.4 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60970/dataprotection.pdf

²¹⁹² Ibid. p.10.

Social media plays an increasingly prominent role in emergency response, both as a means of warning and advising the public (see section 4.4) but also to “help responders gain a more accurate picture.”²¹⁹³ In policing terms this means using “monitoring tools currently available on the market ...to track online conversations, identify emerging issues and monitor the online communities most influential to the police.”²¹⁹⁴ National Police Improvement Agency guidance *Engage: Digital and Social Media Engagement for the Police Service* claims:

*“These tools continue to help us to understand the policing issues that people are talking about online and how we can best engage with these communities to impact upon confidence in the police.”*²¹⁹⁵

²¹⁹³ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.139.

²¹⁹⁴ National Policing Improvement Agency guidance - Engage: Digital and Social Media Engagement for the Police Service, May 2011, p.19 http://www.acpo.police.uk/documents/LPpartnerships/2010/20110518%20LPPBA%20dm_engage_v61.pdf

²¹⁹⁵ Ibid.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The principle legal instrument in the field of crisis management is the *Civil Contingencies Act 2004*. This is supplemented by the *Emergency Response and Recovery Non statutory guidance accompanying the Civil Contingencies Act 2004*, published by the CCS. As explained in the previous section, the Central Government's *Concept of Operations* sets out crisis management principles and arrangements in the UK for responding to and recovering from emergencies.

2.2 General crisis (emergency, disaster) management law

Background to the Civil Contingencies Act (CCA) 2004

Following a series of emergencies in 2000-2001 (the fuel crisis and severe flooding in late 2000 and the outbreak of Foot and Mouth Disease in 2001) the government initiated a review of emergency planning regulations. It concluded that existing legislation no longer provided an adequate framework for modern civil protection efforts and that new legislation was required.

Following public consultation on a draft Bill from June to September 2003, the Civil Contingencies Bill was introduced to Parliament on 7 January 2004. The Bill received Royal Assent on 18 November 2004 and henceforth became known as the Civil Contingencies Act 2004.

Statutory basis of the CCA regime

The Civil Contingencies Act 2004 provides a single framework for civil protection in the UK. It sets out the relationship between the central, regional and local tiers within England, as well as covering the relationship between UK central government and the devolved administrations in Scotland, Wales and Northern Ireland.

Accompanying Regulations flesh out the detail of the Act, and it is also supported by statutory guidance *Emergency Preparedness*, published by the CCS and revised in 2012, which sets out how the CCA's duties and supporting regulations should be implemented. The Act, regulations and guidance are together referred to as the CCA regime.

The CCS has also published *Emergency Response and Recovery non-statutory guidance* "to establish good practice based on lessons identified from responding to and recovering from emergencies, both in the UK and internationally." The Cabinet Office has published many more official documents on crisis management and civil security stakeholders often create their own guidance relevant to their particular field. For example, the London Emergency Services Liaison Panel has published eight

editions of a Major Incident Procedure Manual to summarise the responses and responsibilities of each of the emergency services at a major incident in London.

To keep the CCA updated, the government created The Civil Contingencies Act Enhancement Programme. It assesses whether there are aspects of the Act where original intentions are not being met, whether the Act needs updating, how to reflect best practice in the Act and supporting guidance and whether the scope of the Act should be broadened. This has led on several occasions to *Emergency Preparedness Guidance* being updated.

Specialised legislation

Severe specialised risks are covered by Regulations that pre-date the CCA. These Regulations have established multi-agency emergency planning regimes in place. To avoid duplication, CCA Regulations stipulate that the duty to maintain plans under the Act does not apply to emergencies which are dealt with by these pieces of legislation.

- Control of Major Accident Hazards Regulations 1999 (as amended 2005 and 2008) impose requirements with respect to the control of major accident hazards involving dangerous substances. They implement Council Directive 96/82/EC on the control of major accident hazards involving dangerous substances (except Article 12 which relates to land use planning). Site operators are required to produce on-site emergency plans for establishments where a dangerous substance is stored.
- The Pipelines Safety Regulations 1996 are enforced by the Health and Safety Executive to ensure that Major Accident Hazard Pipelines are designed, constructed and operated safely. The Regulations task local authorities with the production of emergency plans or the modification of existing plans, to cover certain major accident hazard pipelines within their area.
- Radiation Emergency Preparedness and Public Information Regulations 2001 implement in Great Britain the articles on intervention in cases of radiation emergency in Council Directive 96/29/Euratom, except where they apply to transport by road, rail, air, sea or inland waterway. The Regulations also partly implement Council Directive 89/618/Euratom on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiation emergency. The Regulations establish a framework of emergency preparedness measures to ensure that members of the public are properly informed and prepared, in advance, about what to do in the unlikely event of a radiation emergency occurring, and provided with information if a radiation emergency actually occurs.

The Energy Act 1976 also contains emergency power provisions which allows for the regulation or prohibition of the production, supply, acquisition or use of fuel during an emergency affecting fuel supplies.

Other legislation regarding industrial emergency planning and safety at sports grounds and events includes:

- Nuclear Installations Act 1965

- The Ionising Radiations Regulations
- The Energy Act (Carbon Capture and Storage) 2008
- Safety of Sports Grounds Act 1975
- Fire Safety and Safety of Places of Sport Act 1987
- The Health and Safety at Work Act 1974
- The Flood and Water Management Act 2010

2.3 Emergency rule

Part 2 of the CCA repeals the Emergency Powers Act 1920 and sets out the government's generic emergency powers legislation. It allows the government to create temporary special legislation (emergency regulations) as a last resort in the most serious of emergencies when both the CCA regime's legislative framework and the emergency provisions of other existing legislation are judged to be insufficient to respond to an emergency in the most effective way.²¹⁹⁶

Emergency regulations can make any provision that could be made by an Act of Parliament or by exercise of the Royal Prerogative and can extend to the whole of the UK including devolved territories. The only Act of Parliament which may not be amended by emergency regulations is the Human Rights Act 1998. This means that, in theory, emergency powers could be used to suspend core constitutional legislation such as the Habeas Corpus Act 1816 and the Parliament Act 1911 (which restricts a parliament to five year terms). This concerned the House of Lords which in 2004 proposed without success an amendment to exempt important legislation from the CCA's emergency power provisions.

Section 22 of the CCA states that "emergency regulations may make any provision which the person making the regulations is satisfied is appropriate for the purpose of preventing, controlling or mitigating an aspect or effect of the emergency." However, the Act's non-statutory guidance emphasises that: "all those powers listed in Section 22 of the CCA will not be collectively available in any specific emergency; the powers actually used must be tailored to the emergency if they are to meet the robust legal tests and safeguards set out in the CCA".

Responsibility for proposing the introduction of emergency regulations and drafting their content falls to the LGD in collaboration with other government departments. The government must then satisfy itself that the conditions of the CCA are being met. The Act stipulates that emergency regulations can only be introduced if the UK or a devolved territory faces serious damage to human welfare, serious damage to the environment or a threat to security from war or terrorism. If these criteria are met the emergency must then satisfy the Act's two additional safeguards which state that emergency powers can only be considered if:

- it is necessary to make provision urgently in order to prevent, control or mitigate an aspect or effect of the emergency when existing powers are insufficient and it is not possible to

²¹⁹⁶ Emergency powers exist in other UK primary legislation such as the Energy Act 1976 which allows for the regulation or prohibition of the production, supply, acquisition or use of fuel during an emergency affecting fuel supplies.

bring forward a Bill in the usual way and there is a need to make the provision by other means;

- and emergency regulations must be proportionate to the aspect or effect of the emergency they are directed at.²¹⁹⁷

Emergency Regulations are made by the Queen by Order in Council on the advice of her ministers. If this is not possible without serious delay, a senior minister may make the regulations by Order. A regulation must be presented to parliament and approved (with or without amendment) within seven days or it will be considered invalid and cease to have effect. If approved, a regulation stays in force for 30 days but can be renewed for a further 30 days at any point if it is considered necessary and proportionate to do so.

CCA guidance emphasises that the timescale for introducing emergency regulations is likely to vary dramatically depending on the scale of the emergency and the number of regulations it requires. In some cases complex legal issues surrounding liability, human rights protection and devolution may be raised, all of which would need to be resolved before emergency regulations could be made. For this reason guidance advises:

*It should be assumed that it will take a minimum of six hours to bring the regulations into effect, or, more likely, a number of days. This must be borne in mind when considering whether it is appropriate to request the use of the powers - if the effects of an incident are expected to be felt in a matter of minutes or to be over in just a few hours, it is extremely unlikely that emergency regulations could be put in place quickly enough to be of any use. In these situations existing “normal” powers, or the Royal Prerogative, can provide legal cover for any action taken.*²¹⁹⁸

When emergency regulations are introduced, the CCA stipulates that the government must appoint a Regional Nominated Coordinator for each region in England to which the regulations relate, and an Emergency Coordinator for each of the relevant devolved administrations. Their primary role would be to facilitate coordination under the emergency regulations, although Coordinators could also be afforded special powers of direction over organisations and the general population and be allowed to requisition property. A body may need to be created to support them in the exercising of their duties.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

As described in Section 3.1, the UK operates a Lead Government Department principle for emergencies that require intervention by central government. One department typically assumes overall responsibility for crisis management; assessing the circumstances of the emergency, ensuring

²¹⁹⁷ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.200.

²¹⁹⁸ Ibid p.201.

that its ministers and other relevant ministers are briefed, handling media and parliamentary interest, and providing co-ordinated policy and other support as necessary to local responders. Other government departments, agencies and, if appropriate, the devolved administrations, provide support to the LGD as necessary to ensure a co-ordinated response. The LGD collaborates particularly closely with the Cabinet Office, and the News Co-ordination Centre when activated (see section 4.4).

Often the LGD for recovery is different to the LGD for response. In such cases government guidance emphasises that they would need to work closely from the outset to ensure a smooth transition of responsibilities and that objectives are shared. The LGD for recovery may call on other government departments for support, both for specialist technical and policy advice as well as local knowledge of the area and key contacts to augment their resources. During the transition from response to recovery, DCLG REDs – which advise the LGD, cabinet office and other relevant government departments and provide a liaison function on crisis management and resilience issues below the national level (see section 3.1) – play an important role in ensuring a smooth handover of information, contacts and ongoing actions.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

While the principles of emergency response and recovery are the same throughout the UK, the management of emergencies that occur in Scotland, Wales or Northern Ireland varies according to the terms of each country's devolution settlement and local administrative arrangements. Consequence management and recovery is generally devolved to the relevant administration in the aftermath of all emergencies.

Each devolved administration has its own emergency planning and lead organisation arrangements including protocols for local responders and systems for coordinating a multi-agency response. Accordingly, even when the UK government reserves competency over an emergency they will typically liaise closely with the relevant devolved administration.

Part 1 of the CCA operates in Scotland and Wales much as it does in England, while in Northern Ireland the Act applies only to a limited number of organisations. Were emergency powers ever to be introduced under Part 2 of the Act, the UK government would be required to appoint an Emergency Coordinator for each of the relevant devolved administrations to facilitate coordination of emergency regulations (see section 2.3).

Scotland

Responsibility for civil protection is largely devolved in Scotland with responsibility resting with the Scottish Resilience Division of the Scottish government. If an emergency relates to an area of devolved responsibility (such as law and order or the environment), the Scottish government will lead the response, liaising as appropriate with the UK government. If the emergency relates to an

area of reserved responsibility (such as national security or nuclear energy) the UK government's lead department will head the response, working closely with the Scottish government.

Even in cases relating to reserved matters, such as terrorism, the Scottish administration will play a full role in response and recovery because a range of devolved matters, such as the emergency services and the NHS, remain the responsibility of Scottish Ministers, and the prosecution of crime is a devolved responsibility of Scotland's Lord Advocate.

At local level, responder organisations coordinate under the auspices of eight SCGs, each formed on the basis of a Scottish Police Force area. They play a similar role to LRFs in England and Wales with responsibility for risk assessment, steering emergency planning initiatives, engaging with the community, running training exercises and overseeing the response to an emergency.

At government level, in the event of an emergency the Scottish Government Resilience Room would be established to inform decision making, ensure cross government coordination of the response and support responders as necessary. If the emergency is UK-wide the Resilience Room would coordinate closely with COBR.

Wales

Responsibility for civil protection is largely non-devolved in Wales, remaining primarily the responsibility of UK government departments. However, the Welsh government has functional responsibility for a number of policy areas (such as health, the environment and fire and rescue) and is primarily responsible for a number of Category 1 and 2 responders. There is a dedicated Welsh government team for handling multi-agency cooperation and engaging with the UK government on issues of emergency planning and response.

The objectives and arrangements for response at the local level in Wales match those in England but take into account devolved functions. LRFs remain the principle mechanism for multi-agency co-operation on civil protection issues.

At government level, Welsh government officials liaise with their UK government counterparts and act as the main point of contact with local responders and SCGs. This structure is set out in the Pan-Wales Response Plan.

When an emergency with a Level 1 impact has occurred or is likely to occur in Wales, the Welsh government will convene the Civil Contingencies Group to provide strategic leadership to emergency response, linking into both the local and national levels as appropriate. The group is chaired by a senior Welsh Government official and comprised of Welsh Government department officials and representatives from organisations relevant to the emergency.

In the event of a Level 2 emergency, or if the Civil Contingencies Group decides that the emergency should be escalated to Level 2, the group will be re-constituted as the Wales Civil Contingencies Committee (WCCC). The WCCC is an advisory body comprising senior government officials and senior experts from Category 1 and 2 responders. Its functions include maintaining a strategic picture of the

evolving situation within Wales, supporting the Government Liaison Team that by this time will have been deployed, and assessing and advising on issues that cannot be resolved at local level. The Welsh Government may also activate the Emergency Co-ordinate Centre (Wales) to link with SCGs and provide briefing and advice to the WCCC, LGD and any other Welsh or UK government department involved in the emergency.

The Welsh Resilience Forum - a non-statutory advisory body - provides a national forum for multi-agency strategic advice on civil protection and emergency planning. The forum meets quarterly and is chaired by the First Minister or the Minister for Social Justice and Regeneration. It provides collective strategic direction to the Wales Capabilities Programme and individual member leadership to the various capabilities sub-groups co-ordinated through a Wales Resilience Partnership Team. It also oversees the Wales Risk Assessment Group which undertakes risk assessment at a pan-Wales level.

A number of other groups provide forums for discussion and the co-ordination of emergency preparedness and response procedures in Wales, including: the Joint Emergency Services Group; the Welsh Borders Resilience Group; the Welsh Government Emergencies Branch and the Wales Media Emergency Forum.

Northern Ireland

Civil protection is largely devolved in Northern Ireland. Responsibility for the strategic coordination and management of most emergencies rests with Northern Ireland government departments (following the LGD principle – see section 3.1) and overall policy and strategy co-ordination lies with the Office of the First Minister and Deputy First Minister. This excludes emergencies relating to terrorism, policing, criminal justice and security, which remain the responsibility of the UK government's Northern Ireland Office. In emergencies of this nature the Northern Ireland Office would activate its Northern Ireland Office Briefing Room arrangements, although the Northern Ireland executive would also activate its own crisis management arrangements because many of the responses required in such emergencies fall within devolved responsibilities.

Emergencies in Northern Ireland are first dealt with locally by the emergency services, district councils and other public services organisations. If an emergency cannot be managed effectively at local level and requires cross-departmental strategic coordination, the Northern Ireland Crisis Management Arrangements will be invoked.

The Crisis Management Group is responsible for setting the overarching strategy of the Northern Ireland government's response to an emergency and has the power to direct the response and commit the resources of the Northern Ireland civil service. It is normally chaired by the First Minister and deputy First Minister acting jointly, and is comprised of other Executive Ministers and departmental senior officials.

The strategic direction set by the Crisis Management Group is supported by the Civil Contingencies Group (Northern Ireland), a pan-Northern Ireland multi-agency forum comprised of senior representatives from Northern Ireland government departments, the Northern Ireland Office,

emergency services, district councils and other organisations relevant to the emergency. The group's functions also include periodically reviewing, researching and briefing member organisations on civil protection policy.

The Crisis Management Group and Civil Contingencies Group (Northern Ireland) are supported by a range of administrative and advisory groups, including a Central Operations Room, a scientific and technical advisory group and liaison arrangements with other co-ordination groups.

These strategic crisis management arrangements, together with provisions for emergency preparedness, are maintained by the Civil Contingencies Policy Branch, located in the Office of the First Minister and Deputy First Minister. The Branch also represents Northern Ireland in policy discussion at UK and international levels.

London

London's patterns of public service provision and government mean that some aspects of civil protection are organised differently. One pan-London LRF covers the whole city, incorporating the Metropolitan Police and City of London Police areas. Each London borough is represented on the LRF by a Borough Resilience Forum which facilitate co-operation and information sharing at the operational level between local authorities and the emergency services. Local authorities are supported in exercising their duties by the London Fire and Emergency Planning Authority which, among other things, helps to develop, maintain and exercise emergency plans for category 1 responders and trains their staff.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

A wide range of voluntary organisations and NGOs, both at local and national level, support the statutory services in the planning, response and recovery phases of most emergencies. These arrangements are generally ad hoc, although their role was clarified by Part 1 of the CCA which requires category 1 responders "to have regard to the activities of bodies whose activities are not carried on for profit" in the course of carrying out their emergency and business continuity planning duties.²¹⁹⁹ CCA guidance states:

*Statutory responders should be aware of the capabilities and capacity of local voluntary organisations and the means of accessing their services, whether as individual volunteers or as members of local or national volunteer organisations. Statutory responders should develop and implement agreed processes for activating call-out mechanisms, and systems for organising, managing, briefing and debriefing volunteers. The voluntary sector should also be included in post-response review and evaluation activity.*²²⁰⁰

Category 1 responders are obliged to consider how the voluntary sector can be involved at every stage, including training and exercising for emergency preparedness. Cabinet office guidance

²¹⁹⁹ Civil Contingencies Act, Part 1, 2, (2) (k)

²²⁰⁰ Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.142.

emphasises that advance planning is essential if the voluntary sector's diverse array of skills and expertise is to be effectively integrated and utilised during the response phase of an emergency. *Emergency Preparedness* guidance states:

*Sound co-operation through the Local Resilience Forum (LRF) processes and directly with individual Category 1 responders should be based on an agreed framework. This structure needs to suit local circumstances, be understood by all concerned and have clearly identified points of contact. These contact arrangements must be kept up to date by regular formal and informal dialogue between each of the participants at local level.*²²⁰¹

Statutory agencies that use volunteers may become responsible for their health and safety, and as such CCA guidance states that "volunteers should be appropriately equipped, trained, supervised and supported by their own organisations."²²⁰² Agencies can use Service Level Agreements, Memorandum of Understanding or other forms of protocol to establish arrangements to identify the level of insurance cover provided by voluntary organisations, the training provided to voluntary sector personnel, or the use of Personal Protective Equipment. When involved in emergency response, the activities of voluntary organisations and NGOs will be subsidised by category 1 responders. *Emergency Preparedness* guidance states that a Memorandum of Understanding should be in place to describe financial arrangements.

The CCS and the British Red Cross established the Voluntary Sector Civil Protection Forum to identify and maximise the voluntary sector's contribution to UK civil protection arrangements and to provide a framework for engagement between the government, emergency services, local authorities and voluntary organisations. The Voluntary Sector Civil Protection Forum is made up of representatives from the voluntary sector, central and local government, devolved administrations, statutory authorities and professional organisations.

2.7 Legal regulations for international engagements of first responders and crisis managers

There are no statutory regulations for deploying first responders and crisis managers overseas. The 2010 Strategic Defence and Security Review commits the UK to working "to ensure that EU civil protection arrangements focus on shared risk assessment and prevention, coordination of mutual assistance, and maximised awareness of critical infrastructure dependencies" (see further section 3.2).²²⁰³ In the event that UK civil servants or civilian experts are committed to overseas missions they are usually seconded, either directly to the governmental agencies of the country in which the programme is being carried out or to international organizations involved in the programme.

²²⁰¹ Emergency Preparedness, statutory guidance to Part 1 of the Civil Contingencies Act: Chapter 14 (The role of the voluntary sector), October 2011, p.5-6.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61037/Chapter-14-role-of-voluntary-sector-amends-10112011.pdf

²²⁰² Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013, p.143.

²²⁰³ Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review, October 2010, p. 63.

3 Organisation

England consists of 34 two-tier counties, 32 London boroughs and 1 City of London or Greater London, 36 metropolitan counties and 46 unitary authorities. Northern Ireland consists of 26 district council areas and Scotland and Wales has 32 and 22 unitary authorities respectively.

England is subdivided into nine administrative regions. Greater London has an elected Assembly and Mayor, but the other regions have a minor role, with unelected regional assemblies and Regional Development Agencies. Below the regional level and excluding London, England has two different patterns of local government in use. In some areas, there is a county council responsible for services such as education, waste management and strategic planning within a county, with several district councils responsible for services such as housing, waste collection and local planning. These councils are elected in separate elections. Some areas have only one level of local government, and these are dubbed unitary authorities. The City of London and the Isles of Scilly are sui generis authorities, predating recent reforms of local government.

3.1 Organisational chart

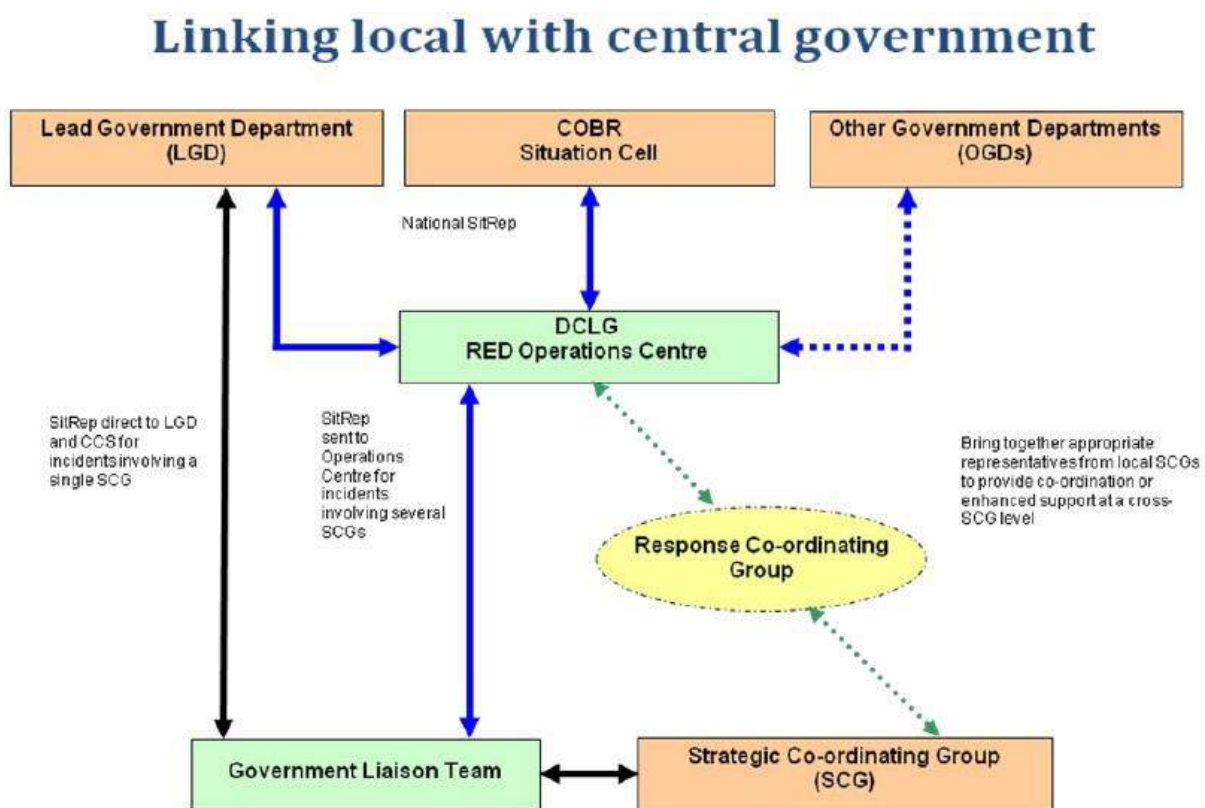


Figure 56: Linking local with central government

Source: Department for Communities and Local Government

Local arrangements for civil protection

Part 1 of the CCA, together with supporting regulations and statutory guidance, establish a clear set of roles and responsibilities for those organisations involved in emergency preparation and response at the local level. The Act divides local responders into two categories and imposes a different set of duties on each.

Category 1 responders are organisations that collectively form the core of the response to most emergencies. They include:

- Emergency services: police forces including the British transport police; fire services; ambulance services; HM coastguard
- Local authorities: all principal local authorities (i.e. metropolitan districts, shire counties, shire districts, shire unitaries)
- NHS bodies: primary care trusts; hospital trusts; foundation trusts (and Welsh equivalents); Health Protection Agency
- Government agencies: Environment Agency; Scottish Environment Agency

Given their front-line role, category 1 responders are subject to the full set of civil protection duties under the CCA. They are required to:

- assess the risk of emergencies occurring and use this to inform contingency planning;
- put in place emergency plans;
- put in place Business Continuity Management arrangements;
- put in place arrangements to make information available to the public about civil protection matters and maintain arrangements to warn, inform and advise the public in the event of an emergency;
- share information with other local responders to enhance co-ordination;
- co-operate with other local responders to enhance co-ordination and efficiency; and
- provide advice and assistance to businesses and voluntary organisations about business continuity management (Local Authorities only).²²⁰⁴

Category 1 responders are excluded from these CCA responsibilities in cases of severe specialised risks and emergencies that are covered by other legislation (for example, the Control of Major Accident Hazards Regulations 1999, the Pipelines Safety Regulations 1996 and the Radiation Regulations 2001), although their help could still be required if appropriate.

Category 2 responders are less likely to be involved in front-line response and planning work, but may be heavily involved in emergencies that affect their sector. They include:

- Utilities: electricity distributors and transmitters; gas distributors; water and sewerage undertakers; telephone service providers (fixed and mobile)

²²⁰⁴ Responding to Emergencies: The central government's concept of operations, April 2013, p.65.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192425/CONOPs_incl_revised_chapter_2_4_Apr-13.pdf

- Transport: Network Rail; train operating companies (passenger and freight); London Underground; Transport for London; Highways Agency; harbour authorities; Airport operators
- Health: NHS strategic health authorities; Health and Safety Executive

The CCA imposes two responsibilities on these responders: cooperation and information sharing with other category 1 and 2 responders.

The intention is to foster cooperation and understanding and cement local-level partnerships and accordingly senior representatives of category 1 and 2 organisations also come together to form Local Resilience Forums (LRFs), the principal mechanism for local multi-agency cooperation under the CCA. LRFs have no legal personality or powers to direct their members, but are obliged to meet at least once every six months and are expected to ensure effective delivery of CCA duties. They also provide specific risk assessments for their geographical area (see section 1.1).

The local response to an emergency

As outlined in Section 1.2, emergency management and response in the UK is founded on a bottom-up approach in which operations are managed and decisions are made at the lowest appropriate level. Local organisations are always the first responders and act as the “essential building block” for the response to an emergency.²²⁰⁵ Indeed, the Cabinet Office emphasises that:

*Most incidents are handled at a local level by the emergency services and by the appropriate local authority or authorities with no direct involvement by central government (though government departments with a potential interest would keep themselves informed on developing events and the handling of the media).*²²⁰⁶

Category 1 responders are required by the CCA to have procedures in place for determining whether an emergency has occurred. Once identified, if the scale and nature of an emergency is deemed to require strategic guidance, an SCG will be formed to coordinate the local multi-agency response. It is located in the Strategic Co-ordination Centre and comprised of senior representatives with executive authority from each of the key organisations involved in the local response. The chair of the group, typically a senior police officer but occasionally a Local Authority Chief Executive, is known as the Strategic Coordinating Group Chair (although this role is often colloquially referred to as a ‘Gold Commander’). The SCG will take strategic decisions on managing the emergency locally. The command structures of individual agencies operate alongside but separate from the SCG.

Three levels of command at single agency level operate below the SCG: operational (Bronze), tactical (Silver) and strategic (Gold). They can often be implemented without the need for multi-agency co-ordination through the SCG, with any necessary co-ordination taking place at silver or bronze level.

²²⁰⁵ Ibid. p.13.

²²⁰⁶ The Role of the Lead Government Department in Planning for and Managing Crises, January 2011, p.1. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61356/lead-government-department-framework.pdf

Incidents are normally handled at the operational level, moving to the tactical or strategic level if required depending on the scale or nature of the incident.

The Central response framework

While most emergencies are managed at the local level, the government has identified three types of emergency that might necessitate the involvement of the sub-national tier in England, a devolved administration, or UK central government:

- *Significant emergency (Level 1) has a wider focus and requires central government involvement or support, primarily from a lead government department (LGD) or a devolved administration, alongside the work of the emergency services, local authorities and other organisations. There is however no actual or potential requirement for fast, inter-departmental/agency, decision making which might necessitate the activation of the collective central government response, although in a few cases there may be value in using the COBR complex to facilitate the briefing of senior officials and ministers on the emergency and its management.*

Examples of emergencies on this scale include most severe weather-related problems. In addition, most consular emergencies overseas fall into this category with the FCO providing advice and support to those affected alongside the authorities in the country affected.

- *Serious emergency (Level 2) is one which has, or threatens, a wide and/or prolonged impact requiring sustained central government co-ordination and support from a number of departments and agencies, usually including the regional tier in England and where appropriate, the devolved administrations. The central government response to such an emergency would be co-ordinated from the Cabinet Office Briefing Rooms (COBR), under the leadership of the lead government department. Examples of an emergency at this level could be a terrorist attack, widespread urban flooding, widespread and prolonged loss of essential services, a serious outbreak of animal disease, or a major emergency overseas with a significant affect on UK nationals or interests.*

Examples of emergencies on this scale, include the H1N1 Swine Flu pandemic, the 2007 summer floods, and the response to the 7th July bombings in London.

- *Catastrophic emergency (Level 3) is one which has an exceptionally high and potentially widespread impact and requires immediate central government direction and support, such as a major natural disaster, or a Chernobyl-scale industrial accident. Characteristics might include a top-down response in circumstances where the local response had been overwhelmed, or the use of emergency powers were required to direct the response or requisition assets and resources. The Prime Minister would lead the national response. Fortunately, the UK has had no recent experience of a Level 3 emergency, but it is important to be prepared for such an event should the need arise.²²⁰⁷*

²²⁰⁷ Responding to Emergencies: The central government's concept of operations, April 2013, p.8-9.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192425/CONOPs_incl_revised_chapter_2_4_Apr-13.pdf

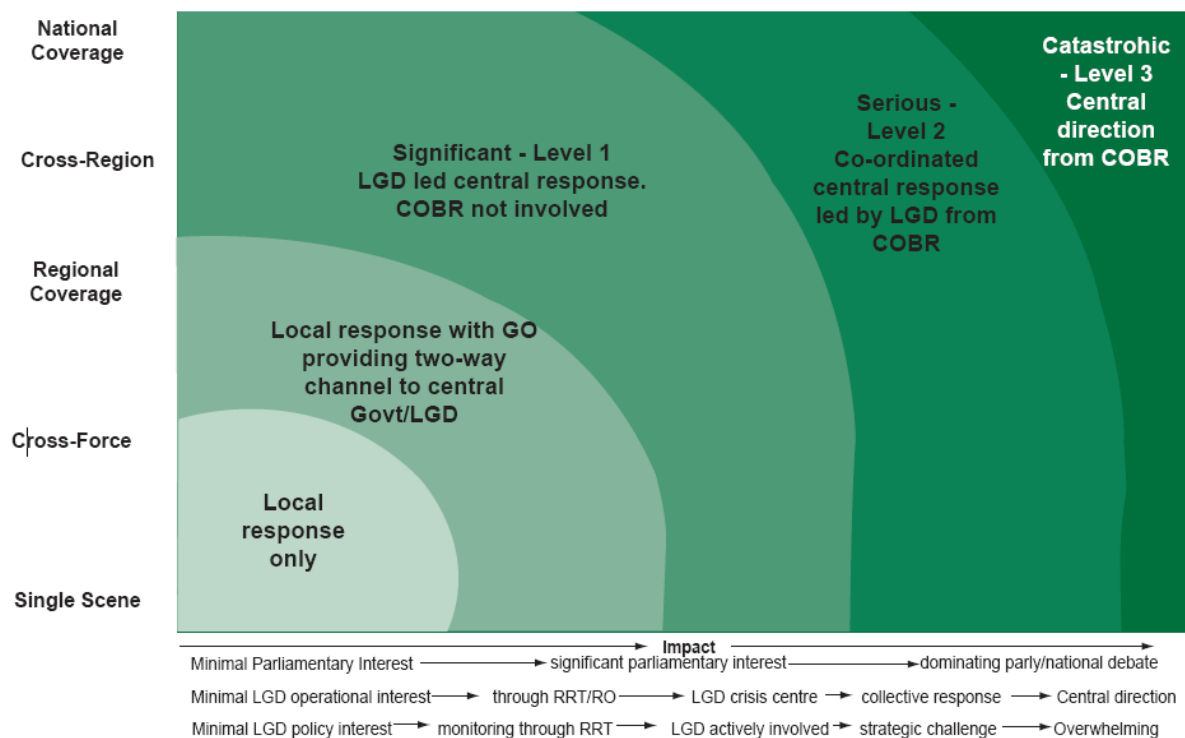


Figure 57: Likely form of central government engagement based on the impact and geographic spread of an emergency in England

Source: Responding to Emergencies: UK Central Government Concept of Operations

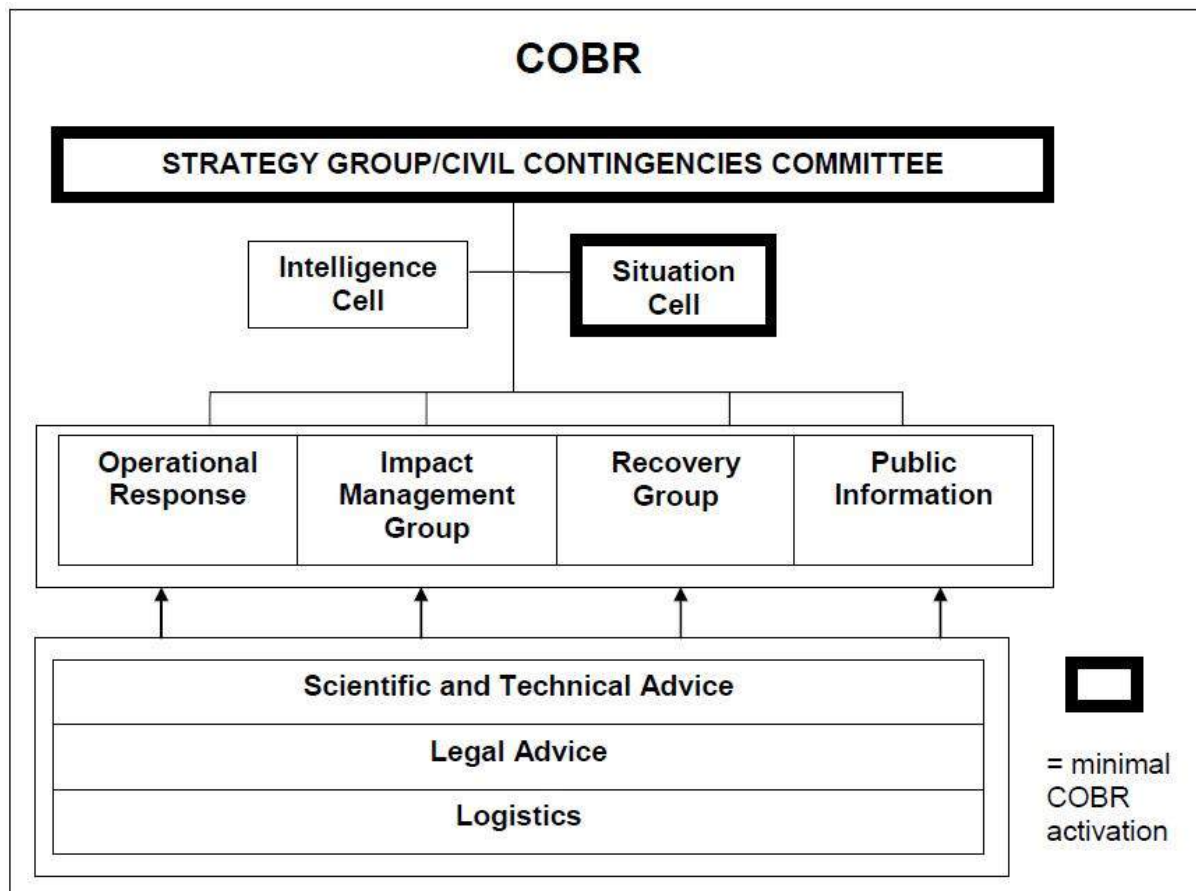
In the event of a Level 2 or 3 emergency, the government's central response framework would be initiated. This would involve the activation of central government's crisis management facilities - the Cabinet Office Briefing Rooms (COBR). COBR is comprised of ministers and senior officials from relevant UK government departments and agencies along with representatives from other organisations as necessary. COBR is responsible for overall strategic planning and its activation is intended to facilitate rapid co-ordination of the central government response and effective decision-making. It also provides an authoritative source of advice for local responders.

COBR is designed to be flexible to adapt to the specific circumstances of an emergency. Within COBR, a senior decision making body oversees the government's response and is supported as necessary by a number of separate cells and supporting blocks of activities. These can be grouped into five broad areas and are supported by sources of specialist advice as required. There is often no need for all of the supporting structures to be activated; a full activation is likely only in the most complex emergencies, particularly where there is a need to manage a mix of highly and unclassified material or there are potentially wide ranging consequences flowing from the initial event (some terrorist scenarios, for example). On many occasions, the senior decision making body is likely to meet with only the Situation Cell for support with operational response considerations the responsibility of the Lead Government Department (see below).

Examples of COBR being initiated within the last year include a series of meetings throughout February 2014, chaired by Prime Minister David Cameron, on the government's response to severe

weather and flooding. COBR also met to discuss the threat posed by the Ebola virus to the UK in July and October 2014.

Figure 58: Structure of Cabinet Office Briefing Rooms



Source: Responding to Emergencies: UK Central Government's Concept of Operations

Overall crisis management is typically supervised by one government department: the Lead Government Department. The LGD takes overall responsibility for assessing the situation, ensuring that its ministers and other relevant ministers are briefed, handling media and parliamentary interest, and providing co-ordinated policy and other support as necessary to local responders. Other government departments provide support to the LGD to ensure a co-ordinated response.

The Cabinet Office publishes a list of pre-nominated lead departments for as many potential emergency situations as possible to ensure clarity in times of crisis.²²⁰⁸ In England, Scotland and Wales, the Home Office is the LGD responsible for terrorist related emergencies and assumes responsibility for all emergencies where the cause is uncertain or until such a time when terrorist activity can reasonably be ruled out.

²²⁰⁸ A breakdown is available on the government website:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61354/lead-government-department-march-2010.pdf

The LGD is responsible for alerting the CCS as soon as it considers any incident (or potential incident) to likely require collective consideration by a range of departments. The CCS was created in July 2001 and is the cabinet office department responsible for emergency planning. It works under the leadership of the Civil Contingencies Committee, a cabinet office committee chaired by the Home Secretary, and in the event of an emergency its role is to provide central focus for cross-departmental and cross-agency commitment, coordination and cooperation (see section 1.2.4 for the CCS's role in orchestrating emergency preparedness).

When it is unclear which government department should take the lead, the CCS will take the immediate lead until the Prime Minister has endorsed its selection of LGD.

Liaison between local responders and central government

When an emergency requires central government intervention, a Government Liaison Officer is dispatched to act as the primary liaison between government departments and the SCG. The Government Liaison Officer is normally from the relevant government office or the LGD, and is supported when necessary by a Government Liaison Team.

If local responders are overwhelmed or an emergency affects a wide geographical area and would benefit from greater coordination, a multi-SCG Response Co-ordinating Group (RCG) may be convened to bring together representatives from different SCGs. Both SCGs and, when formed, the RCG, report to their local Department for Communities and Local Government Resilience and Emergencies Division (DCLG RED – England is divided into four REDs whose seats are in London, Birmingham, Bristol and Leeds) which acts as conduit for communications between central government and the local level.

REDs are responsible for supporting local response and recovery efforts, and ensuring that there is an accurate picture of the situation in their area (see Figure 6). They advise the LGD, cabinet office and other relevant government departments on what support is likely to be required by local responders to recover from an emergency. REDs are also responsible for liaising with government in emergencies below the national level that don't require intervention by central government and are the first point of contact between government and all LRFs in England.

Scientific support during emergencies

The effective management of most emergencies requires access to specialist scientific and technical advice, for example regarding the public health and environmental implications of a flood or the spread of a disease.

At local level, the SCG is advised to establish a Science and Technical Advice Cell (STAC) at an early point of the response phase to provide a common and coordinated source of scientific and technical advice. The STAC's designated lead usually comes from the health community and will work with the SCG to select the cell's core membership, typically from government agencies.

At national level, COBR and government departments receive advice from the Scientific Advisory Group for Emergencies (SAGE) which is responsible for coordinating and peer reviewing scientific and

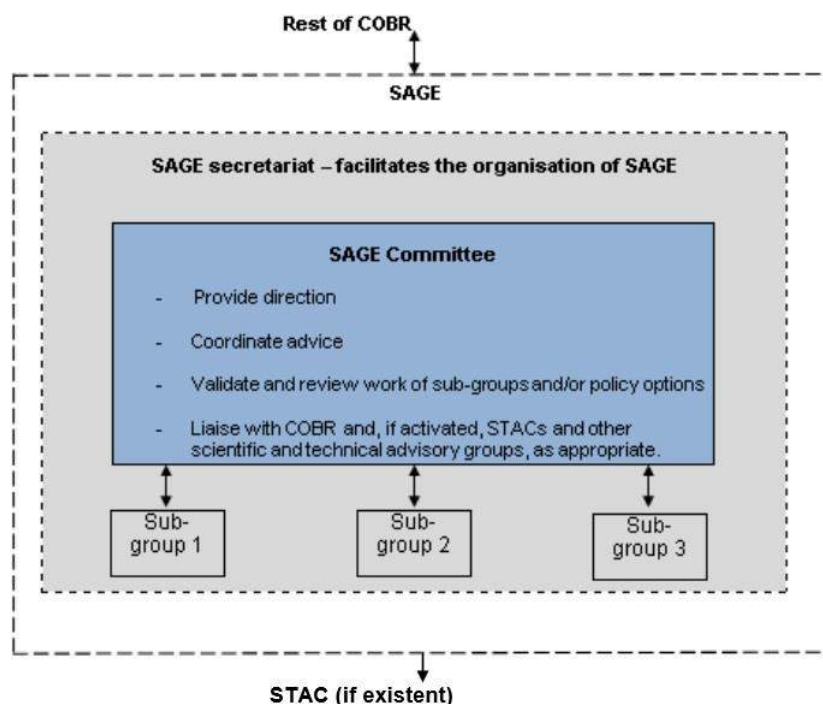
technical advice to inform evidence-based ministerial decision making. SAGE can be scaled up or down in size depending on the nature of the emergency (similarly to COBR) and is usually chaired by the Government's Chief Scientific Advisor.

SAGE representatives report to the ministerial and official groups within COBR. The Government's Chief Scientific Advisor usually represents SAGE at ministerial meetings. A SAGE committee oversees the work of SAGE's sub-groups - which can be many depending on the nature and scale of the emergency - established to focus on specific issues. A SAGE secretariat, typically provided by the LGD, has the role of activating and deactivating SAGE and supporting its functions.

To ensure consistency, SAGE will liaise with STAC(s). Interaction arrangements are defined by the LGD in consultation with the Cabinet Office and the Government Office for Science, and can vary depending on the nature of the emergency. The standard interaction model, designed to embed scientific advice provision into both local and central government decision-making is outlined in Figure 9.

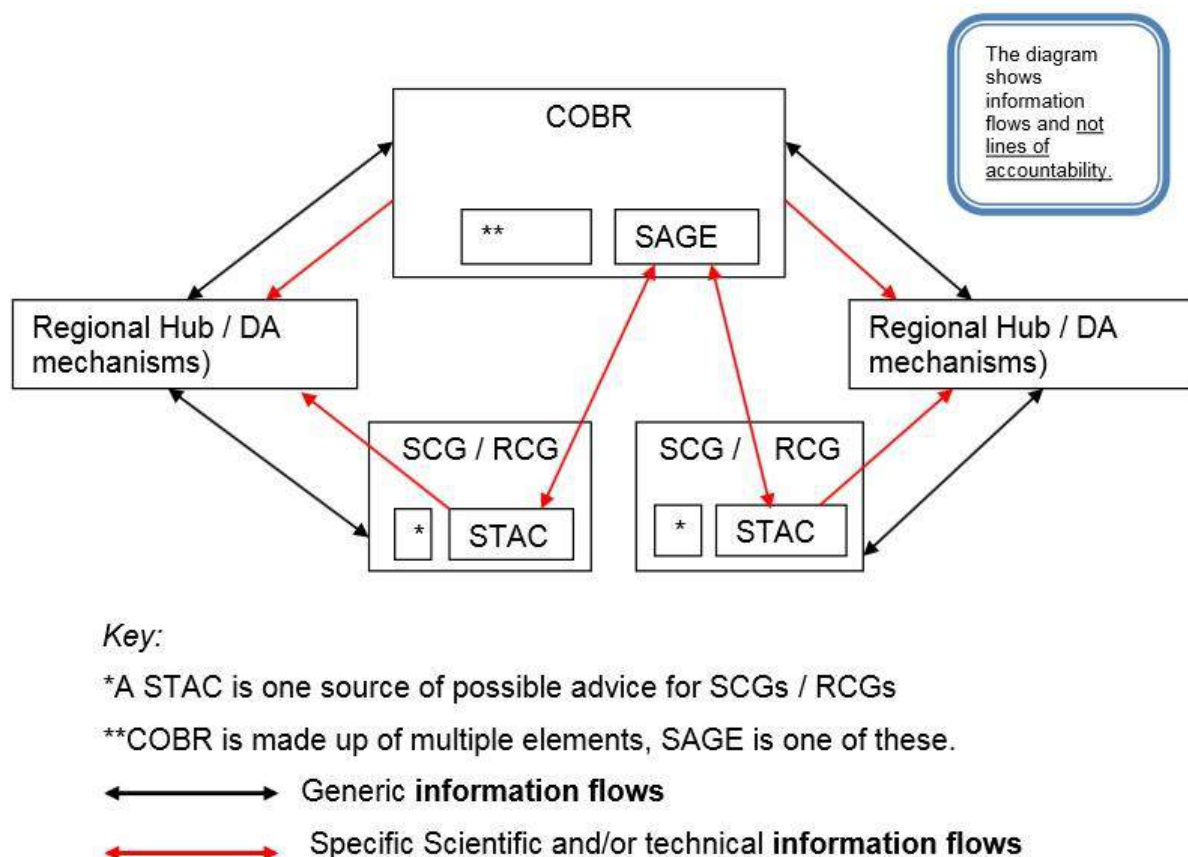
Most recently, SAGE was activated during the 2009 H1N1 influenza pandemic, during the 2010 volcanic ash disruptions and the Fukushima nuclear incident in 2011. STACs have been activated for a number of events, including the 2008 Cumbrian flooding.

Figure 59: SAGE Governance structures



Source: Cabinet Office Enhanced SAGE Guidance, October 2012

Figure 60: Default SAGE, STAC interaction model



Source: Cabinet Office Enhanced SAGE Guidance, October 2012

3.2 Organisational cooperation

Operational cooperation within the EU

The UK can cooperate with other countries bilaterally, although this happens very rarely. The ANVIL study found that “the UK has not invoked a bilateral agreement with regard to crisis management in the period 2000-2012.”

More commonly, the UK participates in intergovernmental organisations and a limited number of multilateral frames of cooperation in crisis management. This includes facilitating mutual aid between countries in the event of an emergency, and sharing good practice and training to better prevent or mitigate the consequences. The UK participates in the EU Civil Protection Mechanism (CPM) which, since its creation in 2001, has functioned as an institutional framework for all ad hoc agreements with other European countries following the occurrence of an emergency. The UK is also:

...a member of the ‘Bonn Agreement’ which, among other issues, engages with pollution as a maritime disaster; within the EU Civil Protection Mechanism, it participates in a working group of 6 member states discussing key aspects of the Mechanism; it also has membership in the ‘Regional Environmental Centre for Central and Eastern Europe’, in the ‘International Organisation of Fire & Rescue Service’, and in the ‘Regional Coordination Council for South

*Eastern Europe’.*²²⁰⁹

However, it remains a very rare phenomenon for the UK to seek help from other countries to manage emergencies. This can be attributed both to the self-sufficiency of the UK’s crisis management system and the fact that, in the UK, crisis management is tied closely to the sensitive subject of national sovereignty. There is a general reluctance among UK practitioners to engage in operational collaboration with EU countries and institutions on internal emergencies. An interviewee told the ANVIL study: “EU institutions do not really play a role in emergency response internally in the UK’.”

The ANVIL study identified only two instances for the period 2000-2012 when the UK considered and accepted external assistance: the Buncefield fire at the Hertfordshire Oil Storage Terminal in December 2005 and the severe snowfalls of winter 2009, during which the government referred to the EU Monitoring Information Centre, for the first and only time, to request grit-salt through the EU Civil Protection Mechanism.²²¹⁰ The UK is more willing to offer assistance, having contributed to requests for assistance on 13 occasions as of February 2014.

The ANVIL study found that while “the euroscepticism of British policy-makers extends to civil security issues”, at the level of political initiatives the UK has not lagged behind in the EU context. The UK is active in the CPM and is a member of an informal working group that discusses main aspects of EU civil protection. The ANVIL study interviewed a member of the CCS who affirmed UK support for the coordination of prevention measures: “The UK supports the general thrust to encourage risk assessment across member states and the sharing of best practice and expertise in this area.”²²¹¹ The British government has also proposed the introduction of a common EU Counter-terrorism strategy, adopted in 2007, and a Civil Contingencies Strategy.

Britain’s level of participation in major EU and NATO exercises has been criticised in the past by the House of Lords European Union Select Committee as “unacceptably low.” In 2009, the Committee found that “the United Kingdom has participated in only 11 of 31 EU or NATO exercises between 2000 and 2008” and often only as an observer. The Committee argued that “using the NATO criterion, ‘participated in the exercise by deploying teams’, it seems that the United Kingdom has participated in none of the annual NATO exercises, and in only one of the EU exercises.”²²¹² However, the UK appears to have become more active in recent years. It hosted the EU exercise Orion in September 2010, an earthquake scenario simulation, and participated in exercises in Greece in May 2010, Estonia in May 2011 and most recently a Denmark-Germany joint hosted exercise in October 2013.²²¹³

²²⁰⁹ Evangelos Fanoulis, Emil Kirchner and Han Dorussen, “Country Study: United Kingdom” Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014), p.20. http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

²²¹⁰ Ibid. p.31.

²²¹¹ Ibid. p.39.

²²¹² House of Lords European Union Committee Report: Civil Protection and Crisis Management in the European Union, March 2009, p.12. <http://www.publications.parliament.uk/pa/ld200809/ldselect/ldcom/43/43.pdf>

²²¹³ List of EU civil protection exercises: <http://ec.europa.eu/echo/en/funding-evaluations/financing-civil-protection/civil-protection-exercises>

The ANVIL study cites enthusiasm among British civil servants to participate in CPM training programmes and emphasises the fact that training on how to coordinate collaboration under the CPM is offered in Britain:

The UK's Emergency Planning College offers a unique, intensive seminar called 'Community Mechanism Introduction', with instructors from different European countries covering a variety of issues from basic knowledge of EU activities on civil protection to brief tabletop exercises. We were able to follow part of the training in November-December 2012 and can confirm the attendance of students/emergency planners from different European partners and their willingness to learn from each other, create networks and get accustomed to cooperation in case they have to operate together.

The UK is active in the CPM's Exchange of Experts in Civil Protection programme, having most recently sent CCS officials to Iceland in April 2014 to improve the UK's understanding of, and preparation for, an effusive volcanic eruption.²²¹⁴ Cabinet Office guidance also cites NATO Civil Emergency Planning as an example of the UK working internationally on emergencies.

The UK is also a member of the European Forum for Disaster Risk Reduction and is a signatory to the Hyogo Framework for Action 2005 to 2015, which it signed, along with 100 other countries, at the World Conference on Disaster Reduction in January 2005. The Framework "is the first plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses" and commits signatories to reduce vulnerabilities to natural hazards. The UK was the first country to have its implementation of the framework peer reviewed in May 2013 and, although scope for improvement was identified, the UK was deemed to have "achieved a high level of preparedness."²²¹⁵

Transboundary crises

Unlike other European countries, the UK's crisis management system has not been tested by severe transboundary crises (and of course is less likely to be given the UK shares a land border with just one other EU Member State, Ireland). Nonetheless, the ANVIL study advises greater interaction with the civil security mechanisms of other European countries, and asks:

*How well would the British civil security system have reacted if the bombings in 2005 had taken place in the Channel Tunnel instead of the London underground? Our estimation is that in such cases the value-added of EU assistance can be significant and has not been sufficiently assessed by the British practitioners.*²²¹⁶

²²¹⁴ EU Exchange of Experts No 249: Volcanic Risk Field Report 7-12 April 2014, Iceland.

http://www.exchangeofexperts.eu/download/public/report/AT_249_SE_UK_-_IS.pdf

²²¹⁵ Building resilience to disasters: Assessing the implementation of the Hyogo Framework for Action (2005-2015): Peer review report United Kingdom, May 2013, p.12. http://www.unisdr.org/files/32996_32996hfauppeerreview20131.pdf

²²¹⁶ Evangelos Fanoulis, Emil Kirchner and Han Dorussen, "Country Study: United Kingdom" Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014), p.43. http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

UK Organisational arrangements

The Foreign and Commonwealth Office (FCO) is responsible for managing the UK's relationship with other countries through its network of embassies and High Commissions, as well as the UK's overall relationship with international organisations such as the UN, NATO and the EU.

However, the CCS in the Cabinet Office is responsible for liaising with the civil emergency response and mutual aid systems of the EU (the CPM including the Monitoring and Information Centre, and the Community Emergency Communication and Information System) and NATO (the Euro-Atlantic Disaster Response Co-ordination Centre, which coordinates emergency planning).

Government departments can have bilateral relationships with specific international or multilateral institutions that will be used when appropriate. For instance, during a pandemic flu, the Department of Health would be best place to engage with the World Health Organisation as part of the UK response.

When an emergency occurs in the UK, the FCO representative in COBR is responsible for handling any requests of support from the UK government. They are also responsible for advising COBR on the concerns and handling of other governments. The FCO is responsible for ensuring that bilateral and multilateral obligations to identify neighbouring countries and/or partners of the emergency have been met, although another government department may have responsibility for making the notification.

For emergencies that occur overseas such as bombings or kidnappings, the FCO is the LGD and will chair COBR unless the emergency has significant direct consequence in the UK (for example the fallout from a nuclear accident or a pandemic) in which case the appropriate government department will lead. If an emergency necessitates the return or repatriation of British citizens the FCO will always be the LGD, although it may relinquish lead status once this process has been completed.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

There is no single document setting out Standard Operating Procedures for crisis management in the UK, nor any compendium of the SOPs applicable to different agencies. Key procedures and guidelines have been set out in previous sections.

4.2 Operations planning

In the UK, emergency planning is predominantly carried out at the local level, in keeping with the country's bottom-up approach to crisis management. The police, local authorities, and all other Category 1 responders, have specific legal duties under the CCA to plan for civil emergencies in their geographical area, such as flooding, industrial accidents, severe weather etc. This also includes putting in place business continuity management arrangements to ensure continuity of service in the event of disruption caused by an emergency, and for effective recovery afterwards. This also applies to industrial action, where it is important for the emergency services in particular to maintain business continuity. All of these plans must be tested regularly through training and exercises.

For example, in London, the London Resilience Forum directs the work of the London Resilience Partnership, which is comprised of more than 170 organisations from Category 1 and 2 responders, the Greater London Authority, central government, the military and business representatives. The Partnership works to assess risks in London and prepare for major emergencies. It has plans and protocols in place outlining how different emergencies would be responded to and conducts multi-agency exercises to test these arrangements. Operational plans exist to cover flooding, pandemic influenza, mass casualties, mass fatalities, excess deaths, structural collapse, adverse weather, mass evacuations, mass shelter, and disease outbreaks.

At national level, the government and relevant government departments plan for specific risks.

Pandemic influenza: the government aims to stockpile enough antivirals to treat 50% of the population and has advanced purchase agreements for the supply of pandemic-specific vaccines. The UK Influenza Pandemic Preparedness Strategy 2011 provides UK-wide guidance on responding to an influenza pandemic.

New and infectious diseases: Public Health England, an executive agency of the Department of Health that was established in 2013, has plans in place for dealing with an outbreak of a new or emerging infection, whether arising abroad or in the UK. It would coordinate the investigation and management of any such outbreak and advise the government on public health risks and necessary

preventative and control measures. Existing Department of Health SARS and pandemic influenza contingency plans would form the basis for dealing with any future outbreaks should either of these diseases re-emerge. Government departments also have plans in place to manage the potential influx of British nationals that may occur in the event of this type of emergency.

Flooding: The government has a programme of flood risk management, which aims to reduce the likelihood and consequences of flooding. The Environment Agency works with the Met Office and the Flood Forecasting Centre to anticipate the risk of flooding and to provide early warning to the areas most likely to be impacted.

Major industrial accidents: Comprehensive plans are in place for handling shortages, or complete outages, of oil, gas and electricity (see section 5.2). Under the Security and Emergency Measures (Water and Sewerage Undertakers) Direction 1998, all water companies must have plans in place to provide alternative water supplies. The Maritime and Coastguard Agency plans for major and minor pollution incidents. A National Response Plan is also in place to deal with the effects an overseas nuclear accident would have on the UK population and infrastructure.

Malicious attacks: Long-standing and regularly activated major incident plans and structures are in place across government to respond to malicious attacks in both crowded places and on infrastructure. All transport sector operators are required to have plans in place to cover a range of malicious attack scenarios.

The government also plans, to varying extents, for all of the other risks identified in the National Risk Register. They include: volcanic hazards, severe weather, severe space weather, severe wildfires, animal diseases, major transport accidents, public disorder, and cyber-attacks.

4.3 Logistics support in crises

Private logistics providers

Private logistics providers likely to have an important role in emergency response and recovery are designated by the CCA as Category 2 responders. They have responsibilities under the Act to cooperate and share information with other Category 1 and 2 responders, and Category 1 responders must take into account how category 2 responders can be involved in crisis management whilst conducting emergency planning (see section 3.1). Both category 1 responders and central government can also sign ad hoc agreements with private companies if an emergency occurs (see section 5.1). During emergency response, privatised utility companies will often be recruited by local authorities.

Military logistics support

The armed forces' national structure, organisation, skills, equipment and training can be of benefit to the civil authorities in managing the response to and recovery from emergencies. Support is governed by Military Aid to the Civil Authority (MACA) arrangements, with detailed rules and procedures governing the employment of armed forces on MACA operations set out by the MoD in

Operations in the UK: The Defence Contribution to Resilience. Reserves, if available, can be deployed alongside regular personnel in most scenarios.

CCA statutory guidance emphasises that assistance is provided on the basis of availability and as such responding agencies should not formulate plans for specific emergencies on the assumption that the armed forces will be able to intervene. In general, the armed forces will intervene only when the scale of an emergency exceeds the capabilities of local responders or when the nature of the emergency requires obvious military intervention, for example in the event of a bioterrorist attack or an accident involving hazardous material.

Deployment

In most circumstances the provision of armed forces support must be requested by a government department and approved by a Defence Minister. The exception is when there is a requirement to save lives, alleviate distress or protect property in which case a commander can decide to provide urgent assistance without government approval. A local authority can also contact central government and request military involvement under the provision of Military Aid to the Civil Community. This happened during the 2009 floods in Cumbria but in general is a very uncommon occurrence. Part 2 of the CCA could also be used to enable the Defence Council to deploy armed forces under emergency regulations.

Organisational

The MoD's Standing Joint Command (United Kingdom) is the operational lead for the armed forces. It responds to MACA requests from government departments and provides advice through army regional brigades. Each brigade has a Joint Regional Liaison Officer who liaises with local responders and acts as their first point of contact. Military units and personnel remain under the MOD chain of command at all times and are not subordinated to the command of civil authorities.

Role

The armed forces can support civil authorities in two ways: by augmenting the capabilities of responders through regular and reserve forces, and by providing niche capabilities. In the case of the latter, Defence Minister may decide to devote specific armed forces and MoD assets to specific emergency response and recovery operations. These include:

- *a UK-based and UK-focussed Command and Control structure*
- *a UK focused Defence communications capability*
- *an Explosive Ordnance Disposal and Chemical Biological Radiological and Nuclear make-safe capability*
- *an air surveillance, policing and defence system*
- *Fishery Protection vessels*
- *a Special Forces capability*
- *a Search and Rescue capability*

A small number of armed forces personnel are available to brief COBR, and logistics specialists could also be deployed to other levels of command, although they are not held at readiness for such tasks. Logistics support could be provided in multiple areas:

Transport: the armed forces use commercial contractors, but may have a small number of helicopters and portable boats available in the UK which could be used to move limited amounts of stores or small numbers of personnel.

Engineering: armed forces engineering equipment is held centrally and amounts to about that typically available in a medium sized town. Relevant engineering expertise on subjects such as power generation, bridging or temporary flood protection, may be available depending on the situation.

Estate: military bases could be available during operational responses or for non-operational support, such as accommodation or training facilities.

Fuel: the armed forces hold sufficient fuel reserves to support military activities and a small number of fuel tankers in the UK.

Telecommunications: the military has its own resilient communications for use by the armed forces and may have some small scale capacity to augment civil capability with specialist engineers and communications staff if required.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

In the UK, responsibility for warning and informing the public depends on the nature of the emergency. Raising awareness on counter-terrorism, for example, is largely a task for central government. Other risks are addressed at both local and national level. In the event of a pandemic, local health authorities would inform and advise the public but information would also be available through the News Centre of the Health Protection Agency. If the Environment Agency issues warnings of coastal or inland flooding, local authorities are depended on to help warn and prepare the public.

Informing the public – traditional and social media

When an emergency occurs, local responders have immediate responsibility for alerting the public. Methods of information delivery available to them are extremely varied, but may include:

- *mobilising officers to go round on foot and knock on doors*
- *from car or helicopter, by loudhailer or other amplified means*
- *media announcements*
- *electronic/variable message boards, eg at the roadside or on motorways*
- *direct radio broadcasts to shipping (in maritime incidents)*
- *PA announcements in public buildings, shopping centres, sports venues, transport systems, etc*
- *automated telephone/fax/e-mail/text messages to subscribers*

- *site sirens*

Responders also increasingly make use of social networks including Twitter and Facebook as well as text messaging alert services such as the Floodline Warnings Direct Service, which is managed by the Environment Agency.

Cabinet office guidance advises that “social media should not be used in isolation but integrated into emergency communication strategies” and emphasises its function as “a method of widening their access to communities and engaging with people through their preferred method of communication”.²²¹⁷ In March 2012, the government published *Smart Tips for Category 1 Responders: Using Social Media in Emergency Management* to provide guidance.

For emergencies with national dimensions, the news media (radio, TV broadcasting and print) remains the government’s primary means of communication. Through the CCS, television stations can be used to alert the public, with the BBC the UK’s nominated “Emergency Broadcast System”. The Radio Amateurs’ Emergency Network, the UK’s national voluntary communications service, may also be used to alert the public.

The UK national siren system, a relic from World War II, was largely dismantled by the end of the Cold War in the late 1980s and early 1990s. However some coastal areas retain and regularly test their sirens to warn of flooding.²²¹⁸

Statutory obligations for Category 1 responders

The CCA includes public awareness and warning and informing as two distinct legal duties for Category 1 responders. The public must be educated on the probability and risks of emergencies (through the Community Risk Register – see section 1.1) and how responders are prepared to deal with them should they occur. If an emergency does occur, or is about to occur, the public must be warned and provided with information and advice as required.

Having warning systems in place is particularly important for organisations such as the emergency services and local authorities whose functions are likely to be seriously obstructed by an emergency. CCA guidance states that strategies for warning, informing and advising the public - either directly or through the media – must be fully integrated into a responder’s CCA emergency plans and tested regularly through exercises and staff training. Responders are responsible for making decisions about precisely when, how, about what and to whom warnings should be issued (see Figure 11).

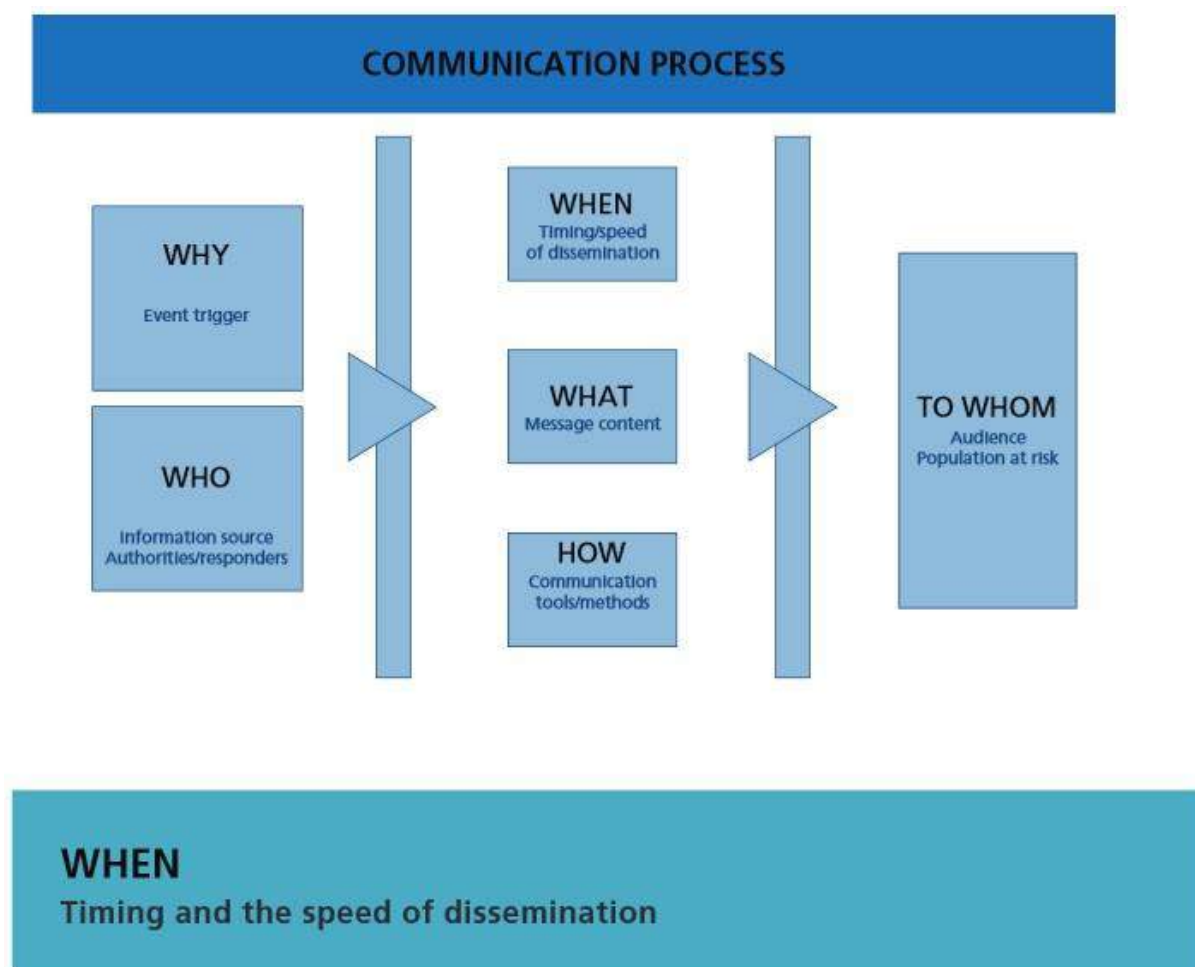
The Act allows for Category 1 responders to discharge their duties collaboratively. To avoid duplication of effort and potential confusion and alarm caused by inconsistent information, cross-agency coordination of information should be established at an early stage and in most cases responders should identify an organisation to take lead responsibility for warning and informing the

²²¹⁷ Cabinet Office guidance: <https://www.gov.uk/government/publications/national-recovery-guidance-generic-issues-social-media>

²²¹⁸ Two recent examples: The Times, 7 January 2014 <http://www.thetimes.co.uk/tto/weather/article3967956.ece>; BBC, 5 February 2014 <http://www.bbc.co.uk/news/uk-england-dorset-26045145>

public.

Figure 61: Public communications timeline: what responders' plans need to achieve



Source: Emergency Preparedness, Chapter 7: Communicating with the public

Other existing legislation also imposes a duty to provide information to the public. Under the Control of Major Accidents Hazards Regulations 1999 and the Radiation (Emergency Preparedness and Public Information) Regulations 2001, operators must provide information, through their local authority, to members of the public liable to be affected by a major accident at the operator's establishment.

News Co-ordination Centre

In the event of an emergency that requires the involvement of central government, the News Co-ordination Centre (NCC) will be established in Whitehall by information staff from the Cabinet Office. It functions alongside LGD and liaises with the Central Office of Information News and Public Relations at the scene of the emergency, if outside London.

Capable of functioning 24 hours a day, the NCC helps to coordinate the information activities of the government departments and agencies involved by compiling and organising expert briefings and overseeing interview bids for ministers. The NCC works closely with national and international media,

monitoring output to correct inaccuracies and identify when additional material would provide a better balance of coverage.

The NCC is also responsible for managing the delivery of public information and safety advice at the national level. Where necessary, it can invoke standing protocols with the media to issue Public Safety Information either nationwide or in specific geographical regions.

It is also responsible for communicating with local responders to ensure that strategic and high-level political decisions are based on accurate, up-to-date information. The NCC may deploy staff to the scene of an emergency for this purpose. It will also be directly involved in handling the influx of media organisations at the scene of an emergency and coordinating on site media arrangements.

Communicating bilaterally with other countries is the responsibility of the FCO, although the CCS in the Cabinet Office is responsible for liaising with the civil emergency response and mutual aid systems of the EU and NATO. Individual government departments can have bilateral relationships with specific international or multilateral institutions to be used when appropriate (see section 3.2).

Government policy

The government provides general advice to the public on a variety of types of emergencies from a number of sources. This includes: guidance on emergency preparedness, resilience and business continuity from the Cabinet Office; terrorism-related emergency guidance from MI5; advice on health emergencies from the Department of Health; travel advice from the FCO; weather warnings from the Meteorological Office; and flood warnings from the Environment Agency.

The National Steering Committee on Warning and Informing the Public furnishes the Cabinet Office with best practice advice on how to warn the public of possible, imminent and actual threats to life, the environment or property, and how to inform them of the appropriate action they can take. It is made up of professionals, practitioners and academics representing organisations that deal with community resilience at both a national and local level:

- devolved governments and administrations in the UK
- Civil Contingencies Secretariat
- Association of Chief Police Officers
- Chief Fire Officers Association
- health professionals/authorities - NHS
- professional institutions and societies
- Environment Agency
- Met Office
- Maritime Coastguard Agency
- Health and Safety Executive
- BBC
- SKY
- ITV

- academic institutions
- independent advisors as considered appropriate

The government also liaises with senior media editors and representatives of local responders in the UK Media Emergency Forum. The forum identifies and discusses strategic communication issues, the media's engagement in civil protection work at local and national level, and practical arrangements for media involvement during emergencies.

5 Capabilities

5.1 Human resources

Permanent emergency and disaster management personnel

Four emergency services in the UK maintain full-time emergency control centres:

- Police
- Ambulance service
- Fire brigade
- Coast guard

Other emergency services, that do not have permanent control centres but can be reached via any of the four principal services listed above, include:

- Lifeboat service
- Mountain rescue service
- Cave rescue service
- Moorland search and rescue service (particularly in Cornwall and Yorkshire)
- Quicksand search and rescue service (operating in the extensive quicksands of Morecambe Bay)
- Mine rescue service
- Bomb disposal (provided by the military)

Involvement of volunteers, volunteer organisations, and specialised NGO personnel

No official list exists of which voluntary organisations contribute to crisis management in the UK – arrangement vary from region to region – but a *Memorandum of Understanding between Members of the Voluntary Sector Civil Protection Forum Working Party* lists the following organisations as active in this field:

- British Red Cross
- Cruse Bereavement Care
- Radio Amateurs' Emergency Network
- St John Ambulance
- The Salvation Army
- Victim Support Service
- Royal Voluntary Service (an organisation that supports older people)

The ANVIL study found that the most prominent voluntary organisations in the field of crisis management are the British Red Cross and St John Ambulance, with the former taking the lead in

disaster relief and post-trauma support and the latter specialising in training of the public in first aid.²²¹⁹

Involvement of private businesses

The UK has no legal framework for outsourcing crisis management responsibilities to the private sector. Instead, central government and Category 1 responders sign ad hoc agreements with private companies when an emergency occurs; indeed most Category 2 responders are private companies. During emergency response, privatised utility companies will often be recruited by local authorities.

The ANVIL study found that no autonomous private agencies deliver crisis management in the UK and failed to discover any public-private agreements focussing exclusively on emergency response. There is, however, some involvement in administrative areas of crisis management: “there is some limited involvement of private companies in telecommunications, ensuring communication between the security services (e.g. Serco in the field of information systems).”²²²⁰

Education programmes

Local Resilience Forums have chief responsibility for educating citizens on the probability of an emergency occurring and the risks it poses. They can do so through local campaigns and social networks and will also educate children by visiting schools and addressing youth on emergency preparedness.

At a national level, the government seeks to build resilience across the UK through its National Resilience Capabilities Programme. A community resilience programme has been in place since 2008 to support existing community initiatives, disseminate these successful activities in other areas and raise awareness and understanding of local emergency response capability (see section 1.5). Government departments also have individual responsibilities for raising awareness about specific risks (for example, the Home Office has responsibility for raising awareness about the threat posed by terrorism) and can do so through nationwide information campaigns.

5.2 Materiel (non-financial) resources

Medicine reserve stocks

The government stocks medicine reserves in case of major health related emergencies. The largest, and most controversial, expenditure is over £600 million since 2006 to stockpile 40 million doses of the antiviral drug Tamiflu to be used in the event of an influenza pandemic; there is limited evidence to prove the drug is effective. Medicine to treat nerve agent poisoning, cyanide poisoning, thallium poisoning, opioid poisoning, anthrax, plague and tularaemia can be obtained by NHS Acute Trusts and Primary Care Trusts from either their local NHS Ambulance Service Trust Emergency Control Room or the Department of Health Major Incident Coordination Centre.

²²¹⁹ Evangelos Fanoulis, Emil Kirchner and Han Dorussen, "Country Study: United Kingdom" Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014), p.26. http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

²²²⁰ Ibid. p.27.

Military assets

If required, and when practical, the armed forces can aid emergency response and recovery operations by providing niche capabilities (see section 4.3). The Defence Minister can devote armed forces and MoD assets to specific emergency response and recovery operations, such as:

- *a UK-based and UK-focussed Command and Control structure*
- *a UK focused Defence communications capability*
- *an Explosive Ordnance Disposal and Chemical Biological Radiological and Nuclear make-safe capability*
- *an air surveillance, policing and defence system*
- *Fishery Protection vessels*
- *a Special Forces capability*
- *a Search and Rescue capability*

State control of energy sources

The Department of Energy and Climate Change's National Emergency Plan for Fuel contains a set of emergency response tools that can be used to regulate or prohibit the production, supply acquisition or use of substances as fuel. This applies to the oil, gas and electricity sectors. The tools can be implemented under Section 3 of The Energy Act 1976, which stipulates that if a domestic incident is likely to result in "an actual or threatened emergency affecting fuel supplies" in the UK, then an Order in Council may be made giving the Secretary of State exceptional powers for "controlling the sources and availability of energy". The National Emergency Plan for Fuel also maintains a capability within the armed forces to make fuel deliveries in the event of a serious disruption to normal deliveries due to industrial action by fuel tanker drivers.

In an electrical supply emergency, the Department of Energy and Climate Change can, as a primary measures, instruct power stations to use alternative fuel sources to generate electricity. This emergency power is supported by the Fuel Security Code. If a prolonged electricity shortage occurs rationing may be necessary, the process for which is outlined in the Electricity Supply Emergency Code.

5.3 Training

Cabinet Office guidance emphasises the importance of training and exercises to ensure that all organisations involved in emergency response are fully prepared for all types of emergencies.

Statutory requirements

CCA regulations oblige Category 1 responders to formulate plans for carrying out exercises and for training staff or other persons. The nature and frequency of these arrangements should be set out in a planning document. Training must be provided for:

- an appropriate number of suitable personnel of the Category 1 responder; and

- other persons whom the responder considers necessary. This could include contractors with a role in the plans and also civil protection partners, both statutory and non-statutory, who have a role in the plans.

Exercises

Cabinet Office guidance states that exercises serve three purposes: validating existing plans; testing well established procedures; and training because they develop responder staff competencies and give them an opportunity to practice their roles. Guidance states that emergency procedures cannot be considered reliable until they have been exercised and proven to be workable.

There are three main types of exercise:

- Discussion based exercises can be used at the policy formulation stage to ‘talk-through’ how to finalise the plan, but more often are used to develop awareness about a completed plan through discussion.
- Table top exercises are based on simulation and typically involve a realistic scenario and a time line against which the efficacy of existing emergency arrangements can be tested. They are run in either a single room or a series of linked rooms which simulate divisions between different responders who need to cooperate. Table top exercises play an important role in validating and exploring weaknesses in procedures.
- Live exercises test the logistics, communications and physical capabilities of emergency procedures and train staff through experiential learning. Responders can develop confidence in their skills and learn what it would be like to use the plan’s procedures in a real event.

At government level, a coordinated cross-governmental exercise programme is in place which covers a comprehensive range of potential emergencies, including accidents, natural disasters and acts of terrorism. It is “designed to test rigorously the concept of operations from the coordinated central response through the range of lead government department responsibilities and the involvement of the devolved administrations, from central government to local responders.”²²²¹

The ANVIL study reports that the government coordinates three or four exercises every year, two of which are necessarily in the field of counter-terrorism. However:

*Exercises in the UK do not involve all government departments. In other words, inter-departmental exercises are a rare phenomenon because of the difficulties in coordinating all departments together and because of the significant budget expenditures required for a national exercise involving all sectors of the government.*²²²²

Local authorities and emergency services are also responsible for developing and implementing their own exercises to test local level capabilities. Counties may choose to invite another region of the UK to conduct a joint exercise, but this would be based on local initiatives and it is not an obligation flowing from governmental or legal requirements.

²²²¹ Cabinet Office guidance: <https://www.gov.uk/emergency-planning-and-preparedness-exercises-and-training>

²²²² Evangelos Fanoulis, Emil Kirchner and Han Dorussen, "Country Study: United Kingdom" Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014), p.24. http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

The UK also observes or participates with international partners in exercises, either through multilateral fora, such as the G8, NATO and the EU, or on a bilateral basis (see section 3.2).

Training

Cabinet Office guidance states that organisations should provide appropriate training to members of staff, and to contractors and the staff of voluntary organisations, who could be involved in emergency planning or response.

Staff should be trained in two broad areas:

Training for emergency preparedness includes training to conduct risk assessment, business continuity management and emergency planning.

Training for emergency response should be given to anyone involved in emergency response and recovery. Each member of staff will need to be aware of the contents of the emergency plan, their role in implementing the plan and the key skills and knowledge that are required during an emergency response.

The Emergency Planning College

The Emergency Planning College is the government's leading provider of emergency preparedness training. Managed by the Serco group on behalf of the CCS, the college attracts over 6,000 delegates a year from the public and private sectors. The Emergency Planning College runs seminars, workshops and training courses on risk assessment, business continuity management, emergency planning and response and a range of specialist courses on subjects ranging from severe weather to communicating with the public in the digital age. It is the only permanent national forum for representatives of local and central government, the emergency services, the private sector and volunteer groups to network and share good practice. The ANVIL study found that: "the type of training on crisis management provided by the EPC [Emergency Planning College], for instance courses on the EU Civil Protection Mechanism, is unique in the British context; in other words there is no other public authority, private organisation or civil society group offering such intense programmes on civil protection."²²²³

National Occupation Standards

In 2008, Skills for Justice, a government licensed Sector Skills Council, developed 18 National Occupation Standards (NOS) for civil contingencies covering those areas considered to be essential to the practice of emergency management. NOS specify the knowledge, skills and understanding needed in a particular role and allow for a clear assessment of an individual's competence against nationally agreed standards of performance. The standards have been adopted by the Emergency Planning Committee, an organisation for professionals dealing with emergency planning, crisis and

²²²³ Ibid.

disaster management, which developed its Core Competencies Framework around the NOS for civil contingencies. The Emergency Planning College runs courses that correlate fully with specific NOS.²²²⁴

Central Government Emergency Response Training

Central Government Emergency Response Training exists for members of government departments, agencies and other response organisations who will work in or with COBR during a national emergency. Held in various Cabinet Office central London locations, its three overarching objectives are to:

- provide delegates with a good knowledge of the processes, procedures and allocation of responsibilities in crisis management
- help delegates consider the skills and techniques required to enable effective and timely pan-government crisis decision making
- illustrate the unique working styles and leadership qualities necessary when working in or with COBR

The programme has four modules:

Module 1: an e-learning module that provides an overview of key doctrine and guidance underpinning the organisation of crisis management.

Module 2: an introduction to UK central emergency response arrangements and the underpinning principles and doctrine. This familiarises delegates with the role of COBR, supporting structures and key procedures and processes.

Module 3: this module covers information management and support to crisis decision-making and explores the concept of shared situational awareness to working practices in COBR, and in departments and agencies working with COBR.

Module 4: an exploration of the strategic issues for senior civil servants arising from their input into national crisis management arrangements.

All delegates take modules 1 and 2, and then either module 3 or 4 depending on their grade and role.

Cabinet Office guidance states that: “Separate arrangements also exist to acquaint ministers and senior officials in some of the unique aspects of crisis management leadership and process management”.

5.4 Procurement

Public sector procurement in the UK is governed the Public Contracts Regulations 2006 (SI 2006 No.5), which implement the EU procurement Directives and apply to the majority of procurements. Public utilities i.e. certain operators in the water, energy, transport sectors) are subject to the Utilities Contracts Regulations 2006 (SI 2006 No.6).

²²²⁴ See: <http://www.epcollege.com/epc/training/courses/courselist/introduction-to-civil-protection>

In addition, the Public Services (Social Value) Act 2012 requires relevant authorities that are engaging in a procurement exercise to consider how the proposed procurement might improve the economic, social and environmental well-being of the relevant area, and how these improvements might be secured.

There are no dedicated rules on procurement for crisis management but special rules apply to procurement in the fields of defence and security. These are set out in Chapter 8 of the Defence and Security Public Contracts Regulations 2011.

Following the adoption of new EU public procurement Directives in 2014, the Cabinet Office has just completed (but not published the results of) a public consultation entitled “Transposing the 2014 EU Procurement Directives”.

Guidance to public bodies is set out in “An Introduction to Public Procurement” (2008). This document sets out the key concepts and principles of good procurement and is intended for senior officials. Although it focuses primarily on activities in central departments and closely associated bodies, it is also relevant where central government provides commercial governance, advice or support to what is described here as the ‘wider network’ (i.e. all devolved public sector bodies, including those in health, education, local government and the emergency services).

The Guidance is also relevant to the process of “Commissioning”. Commissioning is where the public sector decides the services or service outcomes (e.g. in adult social care or children's services) or the products that it needs, acquires them and makes sure that they meet requirements. The processes involved in commissioning and procurement are broadly the same.

Procurement in the field of defence and security typically uses restricted and negotiated procedures.

5.5 Niche capabilities

Training

The government's Emergency Planning College has leading courses on EU Civil Protection Mechanism: see sections 3.2 and 5.3, above.

Volcanic activity

According to the UK's National Risk Register:

The International Civil Aviation Organization has an established International Airways Volcano Watch consisting of nine Volcanic Ash Advisory Centres (VAACs) located around the world, each of which has the responsibility for coordinating and disseminating information on volcanic ash that might endanger aircraft. The London VAAC, run by the Met Office, has

responsibility for monitoring 20 3. Risk descriptions Iceland, the UK and the north-east area of the North Atlantic.

Under the auspices of the World Meteorological Organization, the Met Office is also one of eight global Regionally Specialised Meteorological Centres for modelling the dispersal of particles (including ash) in the atmosphere. Such models allow evidence-based judgements to be made to determine whether it is safe to fly and whether passenger safety can be protected.

Counter-terrorism

The UK is widely recognised as a leading authority on counter-terrorism in the European Union. It has played a significant role in the development of the EU's counter-terrorism strategy and is home to the European Police College.

Resources

Legislative acts

Civil Contingencies Act 2004

http://www.legislation.gov.uk/ukpga/2004/36/pdfs/ukpga_20040036_en.pdf

Control of Major Accident Hazards Regulations 1999 (as amended 2005 and 2008)

The Pipelines Safety Regulations 1996

Radiation Emergency Preparedness and Public Information Regulations

The Energy Act 1976

Nuclear Installations Act 1965

The Ionising Radiations Regulations

The Energy Act (Carbon Capture and Storage) 2008

Safety of Sports Grounds Act 1975

Fire Safety and Safety of Places of Sport Act 1987

The Health and Safety at Work Act 1974

The Flood and Water Management Act 2010

Official documents (white papers, strategies, etc.)

Emergency Preparedness: Guidance on part 1 of the Civil Contingencies Act 2004, its associated regulations and non-statutory arrangements.

<https://www.gov.uk/government/publications/emergency-preparedness>

Emergency Response and Recovery: Non statutory guidance accompanying the Civil Contingencies Act 2004, revised October 2013

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253488/Emergency_Response_and_Recovery_5th_edition_October_2013.pdf

Responding to Emergencies: The central government's concept of operations, April 2013.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192425/CONOPs_in_ncl_revised_chapter_24_Apr-13.pdf

National Risk Register of Civil Emergencies 2013 edition

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211867/NationalRiskRegister2013_amended.pdf

Enhanced SAGE Guidance: A strategic framework for the Scientific Advisory Group for Emergencies, October 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/80087/sage-guidance.pdf

The Role of the Lead Government Department in Planning for and Managing Crises, January 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61356/lead-government-department-framework.pdf

The Lead Government Department and its role - Guidance and Best Practice, March 2004.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61355/lead-government-departments-role.pdf

Departments Responsibilities for Planning, Response, and Recovery from Emergencies, March 2009.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61354/lead-government-department-march-2010.pdf

Flood Support Schemes - Funding available from central government, March 2014.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312180/Summary_of_Support_Guide.pdf

Lessons Identified from UK Exercises and Operations – a Policy Framework, January 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61349/lessons-learned-exercises-framework.pdf

The Government's Response to Sir Michael Pitt's Review of the summer 2007 Floods - Final Progress Report, 27 January 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69489/2012-01-31-pb13705-pitt-review-progress.pdf

Strategic National Framework on Community Resilience, March 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60922/Strategic-National-Framework-on-Community-Resilience_0.pdf

Keeping the Country Running: Natural Hazards and Infrastructure - A Guide to improving the resilience of critical infrastructure and essential services, October 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61342/natural-hazards-infrastructure.pdf

Business Continuity Management Toolkit.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/137994/Business_Continuity_Management_Toolkit.pdf

Data Protection and Sharing – Guidance for Emergency Planners and Responders: Non-statutory guidance to complement Emergency Preparedness and Emergency Response & Recovery, February 2007.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60970/dataprotection.pdf

National Policing Improvement Agency guidance - Engage: Digital and Social Media Engagement for the Police Service, May 2011, p.19.

http://www.acpo.police.uk/documents/LPpartnerships/2010/20110518%20LPBA%20dm_engage_v61.pdf

Operations in the UK: The Defence Contribution to Resilience, September 2007

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61965/defencecontribution1.pdf

Using Social Media in Emergencies – Smart Tips for Category 1 Responders Using Social Media in Emergency Management, March 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85946/Using-social-media-in-emergencies-smart-tips.pdf

Online resources (e.g. websites of key CM organizations)

Emergency response and recovery: <https://www.gov.uk/emergency-response-and-recovery>

UK Police Service: <http://www.police.uk/>

Fire & Rescue Service: <https://www.gov.uk/government/policies/supporting-fire-and-rescue-authorities-to-reduce-the-number-and-impact-of-fires>

Chief Fire Officers Association: <http://www.cfoa.org.uk/>

National Health Service: <http://www.nhs.uk/Pages/homepage.aspx>

Ministry of Justice: <http://www.justice.gov.uk/>

Local Government: <https://www.gov.uk/government/topics/local-government>

Local Government Association: <http://www.local.gov.uk/?pageId=1>

Environment Agency: <https://www.gov.uk/government/organisations/environment-agency>

The Health & Safety Executive: <http://www.hse.gov.uk/>

Highways Agency: <https://www.gov.uk/government/organisations/highways-agency>

Maritime & Coastguard Agency: <https://www.gov.uk/government/organisations/maritime-and-coastguard-agency>

Ministry of Defence: <https://www.gov.uk/government/organisations/ministry-of-defence>

Publications

Evangelos Fanoulis, Emil Kirchner and Han Dorussen, "Country Study: United Kingdom" Analysis of Civil Security Systems in Europe (FP7 ANVIL project, February 2014).

http://anvil-project.net/wp-content/uploads/2014/02/United-Kingdom_v1.1.pdf

Building resilience to disasters: Assessing the implementation of the Hyogo Framework for Action (2005-2015): Peer review report United Kingdom, May 2013.

http://www.unisdr.org/files/32996_32996hfaukpeerreview20131.pdf

House of Commons Science and Technology Select Committee Report: Scientific advice and evidence in emergencies, March 2011.

<http://www.publications.parliament.uk/pa/cm201011/cmselect/cmsctech/498/498.pdf>

Andrew CK Lee, Wendy Phillips, Kirsty Challen and Steve Goodacre. "Emergency management in health: key issues and challenges in the UK". BMC Public Health 2012, 12:884.

<http://www.biomedcentral.com/content/pdf/1471-2458-12-884.pdf>

Andrew CK Lee, Kirsty Challen, Paolo Gardois, Kevin Mackway-Jones, Simon Carley, Wendy Phillips, Andrew Booth, Darren Walter, Steve Goodacre. "Emergency Planning in Health: Scoping study of the international literature, local information resources and key stakeholders", National Institute for Health Research study, November 2012.

http://www.nets.nihr.ac.uk/_data/assets/pdf_file/0017/85112/FR-09-1005-03.pdf

House of Lords European Union Committee Report: Civil Protection and Crisis Management in the European Union, March 2009.

<http://www.publications.parliament.uk/pa/ld200809/ldselect/ldeucom/43/43.pdf>



Driving Innovation in Crisis Management for **E**uropean **R**esilience

ALBANIA

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response



Responsible Partner: CSDM (Georgi Tsvetkov, Philip Spassov, Vesselin Petkov, Todor Tagarev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by EOS and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Albania has a total area of 28,748 km². It shares a border with Montenegro to the northwest, with Kosovo to the northeast, with Macedonia to the north and east, and with Greece to the south and southeast. It has a coastline of approximately 476 km. Administratively, the country is divided into 12 regions (Albanian: qark or prefekturë), 36 districts, and 28 municipalities, which are the basic units of local self-government.

Albania is one of the European countries particularly exposed to predominantly natural disasters. Its climate is shaped by the Mediterranean (Adriatic) sea to the East and the rugged mountainous landscape covering most of the territory to North, West and South. The main hazards are forest fires, floods, earthquakes and snowstorms. The high precipitation, combined with the high rate of seismic activity and anthropogenic factors (deforestation, urbanisation and a dam-burst risks) define floods and landslides as very likely and potentially devastating.

Crisis management is organised at three levels – national, regional and local. At national level, the Council of Ministers leads and governs the national system of civil emergency management in Albania, with the main role played by the General Directorate of Civil Emergencies (logo on Figure 1) in the Ministry of Interior.



Figure 62: Symbol of the Albanian Civil Protection.

Prefects in the prefekturës (regions) are responsible for planning and coping with civil emergencies at prefekturë (regional) level. A Commission of Planning and Responding to Civil Emergencies is established in each prefekturë with the task to coordinate activities of the respective authorities and volunteer organisations for planning and coping with emergency. Accordingly, the mayor or the head of commune is responsible for planning and responding to civil emergencies in the respective municipality or commune (local) level. Under the chairmanship of the mayor or the head of commune, a Commission of Planning and Responding with Civil Emergencies is established, and its main task is to coordinate all activities of the local government unit and volunteer organisations, responsible for planning and responding to emergencies.

The principal operational forces or active structures in Albania are comprised of the Armed Forces; Directorate of Fire Protection and Rescue (PMNZZH); the Ambulance Service; the State Police and other Police units; Directorate of State Reserves; Units specialised in mines and technical response; Monitoring and operational supportive structures.

Human resources dedicated to crisis management (excluding Armed Forces' personnel) include approximately 450 civil protection personnel at prefekturë level (app. 50) and personnel employed in civil protection at municipal or district level. Involvement of private companies and volunteers is limited to approximately 500 active personnel.

Overall, Albania has limited capacity to prevent and capability to react to natural or anthropogenic disasters. With legacy shaped by the autarkic communist dictatorship of Enver Hoxha and civil unrests in the 1990s, Albania has one of the lowest GDP per capita in Europe, despite the economic growth in the past several years.

The Albanian government has a clear understanding about the risk associated with natural or anthropogenic disasters. It has developed the necessary legal framework. However it faces considerable challenges in mitigating disasters, primarily due to socio-economic factors and inadequate organization. At the same time, the capacity for disaster response is also limited, due to financial constraints and the poor condition of the country's economy. In fact, any significant accident/ disaster would require international assistance.

Table of Contents

ALBANIA Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1649
Overview	1650
Table of Contents	1652
List of Figures	1654
List of Tables.....	1654
List of Abbreviations.....	1655
1 Policy	1657
1.1 Risk Assessment.....	1657
1.1.1 List of major hazards and risks in Albania	1660
1.2 Policy and Governance	1662
1.2.1 Strategy scope and focus.....	1664
1.2.2 Monitoring and analytical support to policy making; R&D	1664
1.2.3 Policy for Prevention	1666
1.2.4 Policy for Preparedness.....	1668
1.2.5 Policy for Response	1669
1.2.6 Policy for Relief and Recovery	1670
1.3 Financing.....	1670
1.3.1 Investing in preparedness	1670
1.3.2 Investing in consequence management.....	1671
1.4 Policy review, Evaluation & Organisational Learning	1671
1.4.1 Post-Disaster Assessment.....	1671
1.4.2 Departmental Lessons Learned systems	1673
1.4.3 Centralised (national) Lessons Learned system	1673
1.4.4 International exchange for Lessons Learned.....	1673
1.4.5 Regular policy reviews.....	1674
1.5 Resilience	1675
1.6 Information sharing and data protection	1675
2 Legislation	1676
2.1 Crisis (emergency, disaster) management concept.....	1676
2.2 General crisis (emergency, disaster) management law.....	1677
2.3 Emergency rule	1678

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1679
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1680
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1682
2.7	Legal regulations for international engagements of first responders and crisis managers	1682
3	Organisation	1683
3.1	Organisational chart	1683
3.2	Organisational cooperation	1685
4	Procedures	1689
4.1	Standing Operating Procedures (SOPs) and Guidelines	1689
4.2	Operations planning	1689
4.3	Logistics support in crises	1691
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1691
5	Capabilities	1693
5.1	Human resources	1693
5.2	Materiel (non-financial) resources	1693
5.3	Training	1696
5.4	Procurement	1697
5.4.1	Procurement regulation	1697
5.4.2	Procurement procedures	1697
5.5	Niche capabilities	1698
	Resources	1699
	Legislative acts	1699
	Other normative acts	1699
	Official documents (white papers, strategies, etc.)	1700
	Online resources (e.g. websites of key CM organizations)	1700
	Publications	1701

List of Figures

<i>Figure 1: Symbol of the Albanian Civil Protection.</i>	<i>1650</i>
<i>Figure 2: Administrative Division of Albania. Source: IPA Beneficiary Needs Assessment Albania.</i>	<i>1663</i>
<i>Figure 3: Organisational Chart of Civil Protection System in Albania.</i>	<i>1685</i>

List of Tables

<i>Table 1: Summarised Table of Natural Disasters in Albania from 1900 to 2014.</i>	<i>1658</i>
<i>Table 2: Summarised Table of Technological Disasters in Albania from 1900 to 2014.</i>	<i>1659</i>
<i>Table 3: Albanian institutions monitoring and assessing risks.</i>	<i>1665</i>

List of Abbreviations

AAF	Albanian Army Forces
AL-DRMAP	Albania Disaster Risk Mitigation and Adaptation Project
ALL	Albanian Lek (the Albanian currency)
ALUIZNI	Agency for Legalization, Urbanization and Integration of Informal Constructions in the Republic of Albania
ARC	Albanian Red Cross
DCA	Danish Church Aid
DPPI	Disaster Preparedness and Prevention Initiative
DRR	Disaster Risk Response
EADRCC	Euro-Atlantic Disaster Response Coordination Center
EOD	Explosive Ordnance Disposal
EU-MIC	European Commission - Monitoring and Information Center
HAZMAT	Hazardous Material
HFA	Hyogo Framework for Action
IEWE	Institute of Energy, Water and Environment
IGewe	Institute of Geoscience, Energy, Water and Environment
IMC	Inter-Ministerial Committee
IOM	International Organization of Migration
IPA	[EU's] Instrument for Pre-Accession
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Strategy for Disaster Reduction
ISDR	[UN] International Strategy for Disaster Reduction
MSNATA	Meteorological Service under National Air Traffic Agency
NCEP	National Civil Emergency Plan
NCESS	National Civil Emergency Service System
NICP	National Inspectorate of Civil Protection
NMHS	National Meteorological and Hydro meteorological Service
NOCCE	National Operation Centre for Civil Emergencies
SAR	Search and rescue
SEE	South Eastern Europe
SEEDRMAP	South Eastern Europe Disaster Risk Mitigation and Adaptation Programme

SEEDRMI	South East Europe Disaster Risk Management Initiative
UNDAC	United Nations Disaster Assessment Coordination
UNDP	United Nations Development Programme
UNDP	United National Development Programme
UNEP	United Nations Environment Programme
UNFCCC	UN Framework Convention on Climate Change
UNHCR	United Nations Humanitarians Committee of Refugees
UNISDR	UN International Strategy for Disaster Reduction
UNMAS	United System Mine Action Service
UXO	Unexploded Ordnance
WMO	World Meteorological Organization

1 Policy

1.1 Risk Assessment

The draft version of National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018²²²⁵ contains a risk assessment based mainly on the UNDP Disaster Risk Reduction Capacity Assessment Report for Albania.²²²⁶

The four main hazards affecting Albania are forest fires, floods, earthquakes and snowstorms. Among other hazards available assessments make reference to landslides, drought, epidemics, avalanches, tsunami, technological hazards, dam burst and storms.

While information on risk of natural hazards in Albania remains a challenge, available data shows that the risk level is increasing and is comparatively higher in Albania than in neighboring countries.²²²⁷ Albania ranks 41st in the world in terms of vulnerability to landslides, 43rd in terms of earthquakes and 58th in terms of drought risks.²²²⁸

Risk of natural hazards is primarily driven by economic, social and environmental factors, as well as institutional and political context. Factors affecting earthquake risk are anchored in the application of building code and standards, the awareness and knowledge of engineers and builders, as well as in the incentives to ensure that non-engineered constructions are built to appropriate norms. A level of earthquake risk has accumulated over many years in Albania. This risk needs to be quantified and factored into emergency plans and future development policies and plans such as efforts to retrofit key buildings.

Other factors are driving the risk levels related to floods and forest fires, such as rapid deforestation, poor watershed management, low levels of preparedness of local population, insufficient monitoring and warning capacity and the need for better coordination between dam control and emergency flood managers.

A certain amount of risk will not be reducible in Albania and alternative mechanisms are required to offset the economic and social impact, such as catastrophic risk insurance schemes.

Climate change is a further compounding factor, as Albania's rain and snow fall occurrence has one of the highest levels of variability in Europe. Climate change is projected to further increase the variability and will result, for example, in a higher incidence of heat waves according to the Intergovernmental Panel on Climate Change (IPCC).²²²⁹ These factors may already be influencing the occurrence and intensity of floods and forest fires in Albania; and, both floods and forest fires are projected to occur more frequently in the future. Albania's National Communication under the UN Framework Convention on Climate Change (UNFCCC) identifies Albania's coastal zones, as well as water re-

²²²⁵ The draft is from 19 June 2014 and is available on <http://www.mbrojtjacivile.al>.

²²²⁶ UNDP, Disaster Risk Reduction Capacity Assessment Report for Albania (2011).

²²²⁷ Two reports outline the level of risk to natural hazards and capacities in disaster risk management in Albania (1) Disaster risk assessment in Albania, UNDP, 2003 and (2) Disaster Risk Reduction Capacity Assessment Report for Albania, UNDP 2011.

²²²⁸ Global Assessment Report on Disaster Risk Reduction, UNISDR, 2013 & 2015 editions. Cf. http://www.preventionweb.net/english/hyogo/gar/2015/en/gar-pdf/GAR2015_EN.pdf, p. 92.

²²²⁹ IPCC Special Report on Extreme Events (IPCC/SREX, 2011).

sources, ecosystems, agriculture, energy and tourism sectors as the most vulnerable to climate change.

From a statistical point of view, the most frequent natural disasters in Albania are floods and earthquakes, with the former also causing significant financial damage (see Table 1).

Examples of recent impacts include the forest fires of the summer of 2007. The fires affected 30,856 hectares of forests and 7,139 hectares of pastures. The floods of December 2010 in the Lower Drini-Buna River Basin cost the Albanian economy ALL 2.5 billion (EUR 18 mln), rising to ALL 4.4 billion (EUR 37 mln) when indirect losses were accounted. A report, produced in 2012, estimates the cost of reducing the risk in the lower Drini-Buna River Basin to an acceptable risk of 50 year return period at ALL 7 973 mln, equivalent to EUR 57 mln. Recently, in February 2015 the Albanian Government de-

Table 38: Summarised Table of Natural Disasters in Albania from 1900 to 2014.²²³⁰

		# of Events	Killed	Total Affected	Damage (000 US\$)
Drought	Drought	1	-	3200000	-
	ave. per event		-	3200000	-
Earthquake	Ground movement	6	47	8429	-
	ave. per event		7.8	1404.8	-
Epidemic	Unspecified	1	-	226	-
	ave. per event		-	226	-
	Viral disease	1	7	66	-
	ave. per event		7	66	-
Extreme temperature	Heat wave	2	3	150	-
	ave. per event		1.5	75	-
	Severe winter cold	2	73	237085	-
	ave. per event		36.5	118542.5	-
Flood	Unspecified	1	4	1500	-
	ave. per event		4	1500	-
	Coastal flood	1	-	8000	-
	ave. per event		-	8000	-
	Flash flood	1	11	35000	7000
	ave. per event		11	35000	7000
	Riverine flood	6	4	92484	17673
	ave. per event		0.7	15414	2945.5
Landslide	Landslide	1	57	26	-
	ave. per event		57	26	-
Storm	Convective storm	2	8	525000	-
	ave. per event		4	262500	-
Wildfire	Forest fire	1	-	75	-
	ave. per event		-	75	-

²²³⁰

Extracted from The International Disaster Database (EM-DAT), maintained by the Centre for Research on Epidemiology of Disasters at <http://www.emdat.be/database>.

clared a state of emergency and asked assistance from NATO, due to floods affecting most severely the districts of Vlora and Fieri.²²³¹

Very conservative estimates of economic losses due to floods, landslides and forest fires that occurred since 2002, put the direct cost to the national economy at ALL 13 bln (EUR 94 mln).²²³² If indirect costs were factored in and the projected losses due to earthquakes were accounted for, the projected costs of disaster to the national economy will be considerably higher.

Extreme temperature events have had severe impacts in the country, which is indicated by a large number of deaths per events. Landslides and earthquakes are the next most severe hazardous events in the country in terms of people killed.

The most severe technological accident recorded to date in Albania is the explosion which occurred at a munitions decommissioning facility on 15 March 2008, affecting more than 10 000 people. The accident caused 26 deaths, injuries to over 300 people, and the destruction of 2,300 buildings and displacement of 4,000 people (see also Table 2).

Some conclusions mentioned in *IPA Beneficiary Needs Assessment* (UNDP, 2011), are not included in risk assessment section of the *Strategy*, i.e. the conclusions emphasising the tendency that the less developed regions and social groups are the most vulnerable.

The South East European Climate Change Framework Action Plan for Adaptation acknowledges that the entire region of South East Europe will have to face increased annual mean temperatures, decreased annual number of precipitation days and increased magnitudes and frequencies of climatic extremes. The majority of SEE countries also share similar vulnerable groups: low-income groups in drought-prone areas with poor infrastructure and market distribution systems, low to medium-income groups in flood-prone areas due to the possible loss of stored food or assets and farmers who may have their land damaged or submerged by increased floods. The first impacts of climate change will likely be felt in the agricultural production, the availability of water resources, forestry and energy (since SEE countries are heavily dependent on hydropower).²²³³

The vulnerability of Albania's citizens and the impact of disasters in the country are significantly compounded by a relatively high degree of poverty, lack of infrastructure maintenance, unsafe build-

Table 39: Summarised Table of Technological Disasters in Albania from 1900 to 2014.²²³⁴

		# of Events	Killed	Total Affected
Industrial accidents	Fire	1	60	-
	ave. per event		60	-
Miscellaneous	Explosion	1	22	10300
	ave. per event		22	10300
Transport accidents	Road	3	42	57
	ave. per event		14	19
	Water	1	16	-
	ave. per event		16	-

²²³¹ NATO, http://www.nato.int/cps/en/natohq/news_117784.htm.

²²³² For comparison, according to World Bank data the GDP of Albania grew from 3.687 billion US dollars in 2000 to 12.9 billion in 2013. See <http://data.worldbank.org/country/albania>.

²²³³ SEE CC Framework, Action Plan for Adaptation.

²²³⁴ Ibid.

ing and land use practices linked to rapid urbanisation, exploitation of natural resources (overgrazing of pasture, overexploitation of forests and riverbeds, etc.) as well as by the various consequences of the transition from a state-controlled to a free-market economy.²²³⁵ Nearly 47 percent of Albanians live below the poverty line. Socio-economically fragile groups being often disproportionately exposed to hazards, the effects of a disaster would negatively affect the prospects for long-term development.

Part of Albania's structural vulnerability stems from the obsolescence of some installations such as dyke systems, drainage channels, high water collection or flood-control facilities and pumping stations. Many of these have not been improved in recent times and their deterioration may easily aggravate the consequences of river flooding. During the winter 2009-2010, severe flooding created a critical situation at the River Drini hydro-power plants and water-reservoirs as well as downstream, in the area between Vau, Dejes and the Adriatic Sea. Albania's flooding potential is further increased by the proliferation of high earth dams constructed on rugged terrain that is subject to landslides and earthquakes. The 2003 Risk Assessment Study of Natural Disasters established that the greatest demand placed on the national civil emergency system would result from earthquakes occurring in Durres, Elbasan, Berat or Vlora. In these regions, only a few hospitals and school structures are designed appropriately and the safety of residential buildings is generally poor.

1.1.1 List of major hazards and risks in Albania²²³⁶

Seismic risk

Albania is characterised by a high rate of seismicity. Albania, together with Greece, Montenegro, Macedonia, southern Bulgaria and western Turkey (all located in the same region), experience almost annual occurrences of at least one earthquake of magnitude ≥ 6.5 . Albania is characterised by intense micro ($1.0 < M \leq 3.0$), small ($3.0 < M \leq 5.0$) and medium-sized ($5.0 < M \leq 7.0$) earthquake activity, and rarely by large ($M > 7.0$) earthquake events. Tirana accounts for more than one quarter of the urban seismic risk, perhaps considerably more if the official population figure is underestimated. The seven largest cities at risk in Albania account for more than 75 percent of the urban risk.²²³⁷ Earthquake risk reduction is crucial as most strong earthquakes have been accompanied by extensive land instability (such as liquefaction, ground subsidence, surface cracks, landslides and rock slides) and can, at times, be held accountable for small tsunamis.

Flood risk

The Albanian river system poses the highest risk of flooding to the country, generally of pluvial origin. The hydrographic basin encompasses an area of 43,305 km², of which 14,557 km² belong to the watersheds of the Drini and Vjosa rivers, which encompass parts of Greece, Macedonia and Kosovo. The eight main rivers in Albania are grouped into six watersheds that transverse the country from east to west. Their main annual discharge is 1,308 m³/sec, which corresponds to the discharge of 30 m³/sec/km². Floods are more frequent during the November–March period, when the country receives about 80–85 percent of its annual precipitation. Due to topographic patterns, these floods

²²³⁵ See www.ifrc.org/PageFiles/86599/Albania.pdf.

²²³⁶ All data in this section is drawn from the Disaster Risk Reduction Capacity Assessment Report for Albania (UNDP, 2011).

²²³⁷ Probabilistic seismic hazard maps for Albania, 13th World Conference on Earthquake Engineering, 2004.

occur rapidly after water has run through the main river hydrographic network for around 8–10 hours.

DRR primarily has to deal with preventive, preparative and reparative measures aimed at flooding of the Buna, Drini and Semani river basins. In these areas the expected number of flooded buildings (100 year returned period) ranges from 15,500 to 24,000 (± 10 percent), which would cause demands for shelter and/or other forms of assistance for an estimated 84,000 to 172,000 (± 10 percent) people. The implications of disaster related to other river basins are considerably lower, ranging from about 4,000–8,000 (± 10 percent) affected buildings corresponding shelter and/or other forms of assistance for 25,000 to 50,000 (± 10 percent) people.²²³⁸ The 100 year return period of West Plain Flooding would adversely affect 20 Districts (out of 36), 341 villages (out of 2,962), 110 Communes (out of 308), about 85,500 buildings covering 7,900,000 m² and 565,000 people.

Risks of Landslide

Albania is characterized by land instability caused by natural factors (e.g. mechanical action of surface and underground water, precipitation, seismic action, physical and chemical conveyance) and anthropogenic factors (e.g. engineering interventions on slopes, the construction of dams, large water retention reservoirs, roads, tunnels and other related infrastructure facilities). The Albanian territory is divided into three zones of natural slope stability – stable, relatively stable and unstable, corresponding respectively to 56.6 percent, 33.6 percent and 9.8 percent of the total territory of the country. Land instability in Albania occurs primarily after massive torrential rain or snowfall. Various types of landslide (rock falls, topples or torrent deposits) are often recorded along disturbed slopes on national and regional transportation routes, in the irrigation water usage or other engineering works.

In addition, hydro-technical works either interrupt the weak equilibrium of geological formations or accelerate existing landslides. Consequently, the largest landslides have developed in the basins of the main hydropower plants of Fierza (the Porava landslide), Vau i Dejes (the Ragami landslide) and Banja (the Banja landslide).

Dam-burst risks

Dams and reservoirs in Albania are primarily constructed for: agricultural and irrigation needs, flood control, hydropower and recreation. Presently there are 630 dam reservoir systems in the country, 307 of which are recognized as either high dams (height ≥ 15 m) or large dam reservoir systems.²²³⁹ Among the 82 ICOLD members, Albania ranks first in number of dams per 10,000 inhabitants. The height of the majority of dams ranges from 10–30 m (524 dams) to 30–60 m (77 dams). Six dams are higher than 60 m, of which two are higher than 100 m (the Koman Dam, 115 m and the Fierza Dam, 167 m). At a height of 167 m the Fierza Dam is the highest dam of this type in Europe. All high dams in Albania are earth-filled.

Migration and urban expansion have led to increased concentrations of populations and material property in such downstream areas. In the event of dam bursts: 246 (57 percent) could affect a population larger than 100; 56 (36 percent) could impact areas with more than 500 inhabitants; and any of the other 57 would affect areas with a population in excess of 2,500. Burst of eight out of those 57 dams could affect the entire towns of Elbasan (population over 100 thousand), Lushnje (population over 37,829) and Divjake (more than 10,000 inhabitants). Albania is planning to build new small hy-

²²³⁸ Risk Assessment Study of Natural Disaster in Albania, 2003.

²²³⁹ ICOLD World Register of Dams, 1998. See also www.icold-cigb.org/GB/World_register/world_register.asp.

dropower plants; currently only 40 percent of country hydroelectric potential is exploited. Therefore this risk is expected to increase in the near future.

Snowfall risk

Snowfall risk occurs mainly during the period from November to March, and in the mountainous northern, north-eastern, central and southern parts of the country. Typical high snow hazards are road blockage (due to the lack of maintenance and poor conditions of roads) and avalanches. The population residing in these areas (at least 30 cm snow-depth) ranges from 11.6 percent (355,000 \pm 10 percent) to 31.3 percent (1 million \pm 10 percent). Disaster preparedness planning is needed for such situations that last longer than 30 days (taking into consideration conditions like household food reserve levels or seriously ill patients).

Wild/Forest Fire risk

Forests occupy roughly 29 percent of Albania. Most of the forestland (77 percent) consists of low productivity degraded forests like oak forests (31.8 percent) and scrubland²²⁴⁰ (25.6 percent). Forest areas can be divided into two basic functional categories: productive forests (some 900,000 ha or 86 percent of the total area); and protected and recreational forests (some 140,000 ha or 14 percent). The forests of Albania are prone to fire, especially at the end of spring and during dry summers.

Among Mediterranean countries, Albania is one of the most affected by forest fires. The total area burnt during 2007 reached 127,000 ha, whereas the figure in 2008 was significantly lower at 19,254 ha (11,389 ha burnt in forest or wooded land and 2,080 ha of agricultural land). Fire causes are of both anthropogenic origin (human negligence, pasture burning and, to a lesser extent, arson) and natural origin (lightning). Human misuse of fire, accompanied with deforestation and grazing practices, are among the key reasons for the forest destruction. For DRR management, more training of fire-fighting personnel is considered necessary.

Technological risks

The main technological hazards for Albania are industrial pollution, toxic wastes, transport accidents, factory explosions and chemical spills. Although the country is well endowed with natural resources, such as oil, natural gas, coal, chromium, copper, nickel and timber, technological risks do not pose a significant threat to the population (except in the case of accidents) due to a low level of industrial activity. However, as hazardous materials, substances and products remain in stock in different parts of the country, DRR preparedness and response are still deemed necessary to properly manage the risk of technological disasters.

1.2 Policy and Governance

According to the Albanian disaster risk response legislation²²⁴¹ the national crisis management framework consist of three levels – national, regional and local.

At national level, the Council of Ministers leads and governs the national system of civil emergency management in Albania. This includes endorsing strategies, policies, programmes that aim to prevent, mitigate, prepare and respond to civil emergency situations.

Each line ministry is responsible for planning and handling civil emergencies according to their area of expertise. To be effective, this requires coordinated inputs from a number of line ministries. The

²²⁴⁰ Or 'shrubland.'

²²⁴¹ To be reviewed at section 2 "Legislation."

Inter-Ministerial Committee of Civil Emergencies coordinates the appropriate actions of all concerned institutions through all the phases of response to civil emergency situations. A *General Directorate of Civil Emergencies* ²²⁴² was established in the Ministry of Interior.

Prefects in the prefekturës (regions) are responsible for planning and coping with civil emergencies at prefekturë (regional) level. Under the chairmanship of the prefect, a Commission of Planning and Responding to Civil Emergencies is established whose task is coordination of activities of the prefekturë authorities and volunteer organisations for planning and coping with emergencies. The 12 prefekturës of Albania have one full-time civil emergency officer.

The mayor or the head of commune is responsible for planning and responding to civil emergencies in the respective municipality or commune (local) level. Under the chairmanship of the mayor or the head of commune, a Commission of Planning and Responding with Civil Emergencies is established, and its main task is to coordinate all activities of the local government unit and volunteer organisations, responsible for planning and responding to emergencies.

The main non-governmental organisation that provides volunteer services for local risk and capacity assessments, public education and community-level disaster planning is the Albanian Red Cross (ARC).

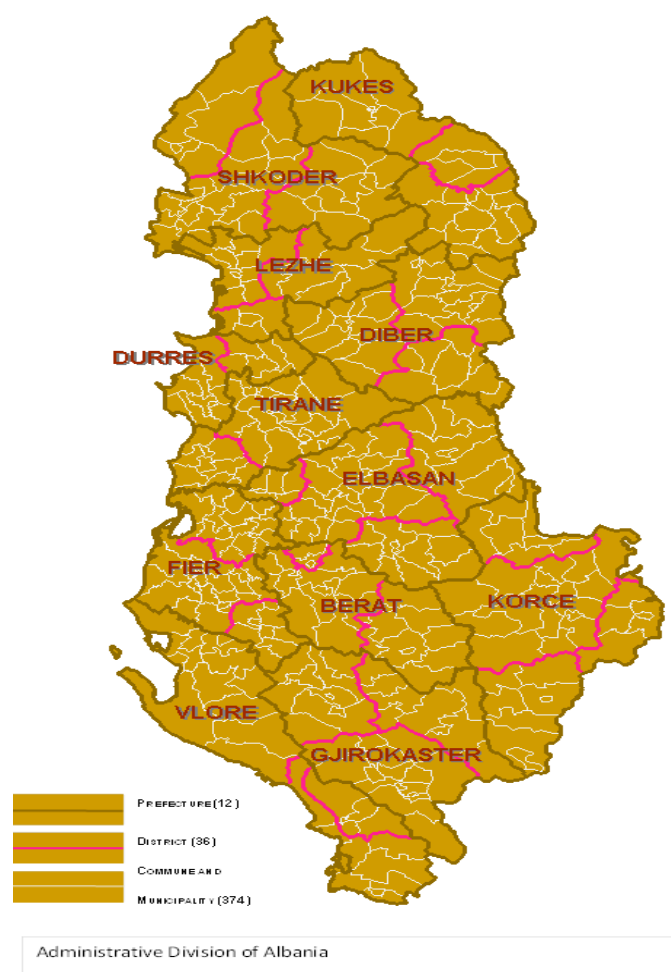


Figure 63: Administrative Division of Albania. Source: IPA Beneficiary Needs Assessment Albania.

²²⁴² The original name of the structure was Department of Civil Emergency Planning and Response, and many documents and pieces of legislation consulted for the report's drafting use that name. It could also be found as General Directorate of Civil Protection.

When describing the Albanian DRR Institutional Framework, the authors of Albania's Needs Assessment report ²²⁴³ concluded that:

Although there are powers and responsibilities assigned to the regional and local governments in DRR, the system in Albania remains highly centralised. Regional and local governments do not receive sufficient funding and in practice are excluded from decision-making. Moreover, legislation does not yet specifically encourage community participation in disaster risk reduction.

1.2.1 Strategy scope and focus

The draft version of *National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018* introduces a comprehensive approach toward DRR and DRM including prevention, preparedness, response and recovery. The document contains a conclusion that *"The main challenge is increasing the level of understanding of disaster risk reduction concepts – in order to shift perception of disaster risk reduction from "disaster response" towards "risk reduction" this needs to be addressed within long-term development plans."*²²⁴⁴ However, it seems that the scope of 'Prevention' is the monitoring of hazards and the early warning. It is hard to find a true "risk reduction" through, for example, requirements and/or actions addressing respective infrastructure, urban and rural development.

1.2.2 Monitoring and analytical support to policy making; R&D

According to the Strategy,²²⁴⁵ the Institute of Geoscience, Energy, Water and Environment (IGEWE) is the institution in Albania for national monitoring and warning structure for natural hazards of meteorological origin, including floods, wildfires and earthquakes. IGEWE is endorsed by the World Meteorological Organization as the National Meteorological and Hydrometeorological Service for Albania. According to IPA Beneficiary Needs Assessment,²²⁴⁶ Albania monitors and assesses its risks from natural hazards through several relevant institutions (see Table 3).

However, the DRR Capacity Assessment Report ²²⁴⁷ states that:

²²⁴³ IPA Beneficiary Needs Assessment, UNDP, 2011, p.10.

²²⁴⁴ Draft version of National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018, June 2014, quote on p. 12.

²²⁴⁵ Draft version of National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018, June 2014, quote on p. 11.

²²⁴⁶ UNDP, 2011, p.13.

²²⁴⁷ Disaster Risk Reduction Capacity Assessment Report, UNDP, 2011, p.15.

Table 40: Albanian institutions monitoring and assessing risks.

Seismic risks	Department of Seismology within the Institute of Geo-sciences (Tirana Polytechnic University)
Floods, avalanches, heavy snow	Primarily by the Institute of Water, Environment and Energy (Tirana Polytechnic University)
Landslides	Institute of Geo-sciences (Tirana Polytechnic University)
Forest fire	Department of Forests and Pastures (Ministry of Agriculture, Food and Consumer Protection)
Epidemics	Institute of Public Health (Ministry of Health)

At University level there is no faculty that supports the education of seismic or hydrology experts. Seismologists and hydrologists are usually drawn from the faculties of mathematics, civil engineer, physics and geophysics and are then trained in seismology or hydrology. A project of the Institute of Geoscience to collaborate with IIZIS (based in Macedonia) and other university institutes in the region, for providing postgraduate education in seismology, has not yet been implemented due to a lack of funds.

Under the Albania Disaster Risk Mitigation and Adaptation Project (AL-DRMAP)²²⁴⁸ project three main activities were financed. One of them was the complete digitalisation of Hydrometeorological data. 20 years of hydrological data and 10 years (2001-2011) of meteorological data have been digitised. The data was undergone quality analysis and has been published on the IGEWE (Institute of GeoSciences, Energy, Water and Environment) website for user access. 40 hydrometeorological observing stations have been installed, and the real-time data from the majority of these stations are now flowing. 3-day and 7-day bulletins are published and posted on the website for user access. Forest Fires Warning Bulletin during the summer and a Meteorological Warning Bulletin during the wet seasons are issued.

Under the Program for Prediction, Prevention and Mitigation of Forest Fire and Flood risk in Albania an advanced system for hydro-meteorological monitoring, DEWETRA,²²⁴⁹ was donated by the Italian Civil Protection Department and the CIMA foundation. The system was implemented in 2010-2012. Out of this program, CIMA also supported the development of disaster loss database in Albania and Serbia, using the Disaster Inventory System (DesInventar)²²⁵⁰.

²²⁴⁸ Albania Disaster Risk Mitigation and Adaptation Project (under the World Bank Disaster Risk Mitigation and Adaptation Project). The project was for over \$9M for 2012-2014. The object is to strengthen institutional capacities (a) to reduce Albania's vulnerability to natural and man-made hazards; and (b) to limit human economic, and financial losses due to these disasters, www.worldbank.org/projects/P110845/disaster-risk-mitigation-adaptation-project?lang=en.

²²⁴⁹ The DEWETRA platform is a real-time integrated system for hydro-meteorological and wildfire risk forecasting, monitoring and prevention. The system is based on the rapid availability of different data which help establish up-to-date and reliable risk scenarios. Available at <http://www.cimafoundation.org/en/cimafoundation/dewetra/>.

²²⁵⁰ <http://www.cimafoundation.org/en/cimafoundation/desinventar/>.

1.2.3 Policy for Prevention

As noted in the *National Civil Emergency Plan* of Albania²²⁵¹ the Prevention and mitigation for existing structures, facilities and environmental areas in Albania is a shared responsibility, requiring:

a) *Information*. Essential information includes:

- Seismological, hydrological and meteorological data;
- Technical information on the conditions of maintenance, repair and safety of: housing and transport infrastructure, and essential installations including dams, mines, public and private sector land and marine industrial installations, complexes and stores;
- Technical information regarding the state of environmental areas, such as drainage basins and watersheds, including forests, rivers, primary, secondary and tertiary channels, unstable slopes, wetlands and reclaimed areas;
- The level of pollution, hygiene and epidemiological data as well as level of civic order.

b) *Observing and Applying Standards*. Developing, resourcing and implementing appropriate schedules and standards include:

- Regular agreed maintenance schedules;
- Agreed forecast repair schedules;
- Attaining and maintaining minimum agreed national standards of safety installations and internal and external inspection procedures.

c) *Improvements*. Planning and resourcing improvements include:

- Repair, upgrading, improving and retro-fitting up to or above original minimum standards of use;
- Taking into account new hazards and risks posed to or by the structure or facility;
- Aiming towards European Community approved standards.

d) *Emergency Prevention Plans*. Developing specific emergency prevention plans from relevant sectors for existing structures, facilities and environmental areas, comprising:

- Identified personnel roles and responsibilities;
- Establishing a monitoring and information system;
- Making clear and known early warning steps and procedures;
- Agreeing on clear public information procedures;
- Developing and testing emergency checklists, key emergency contacts and simulation exercises.

e) *Training*. Investing in appropriate training of identified emergency situation personnel and joint training with related partners in civil emergency matters.

f) *Investment*. Actively soliciting investment in prevention and mitigation through new and existing partnerships, coherent planning and attainment of industry and EU norms.

The Plan also envisages additional general measures for prevention and mitigation, related to:

- New structures, facilities and developing environmental areas;
- Review and enforcement of legislation;

²²⁵¹ Prepared by the Ministry of Local Government and Decentralization and adopted by the Council of Ministers with Decree no. 835 (2004).

- Inspectorates, Secretariats and Diverse Polices; and
- Responsibilities and planning at various levels.

More specifically, the National Civil Emergency Plan (p. 25) states that it is necessary to establish of an efficient structure for civil emergency prevention – National Inspectorate of Civil Protection (NICP). As part of prevention and mitigation structures, NICP will be present in planning, projects implementation and providing licenses. With a structure at both central and prefekturë level, this inspectorate will take the role for monitoring and reporting on the progress in monitoring all the territory. The National Inspectorate of Civil Protection will have monitoring, controlling and reporting roles through supervising the work in progress of all structures relevant to civil emergencies. The NCIP will control the work for planning and implementation of prevention measures for civil emergencies of all state and private subjects. NICP will also control the status, i.e. the level of manning, equipment and the level of preparedness of the operational forces to respond to civil emergencies.

In its work, the NCIP will pursue competences and responsibilities foreseen in legal and sublegal documents/acts such as for undertaking measures against the institutions, structures and subjects which have not correctly implemented rules, regulations, standards and legal bases for prevention, preparedness and response to civil emergencies, as well as the activities for recovery and development of the affected area.

By now such an Inspectorate has not been established. In fact, there is no single authority coordinating the disaster prevention policy. The draft of the National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018 (p.10) states that the General Directorate of Civil Emergencies needs to be promoted to an Agency, functioning under the Prime Minister's Office.

According to Annex 2 of the Draft Strategy, there are 15 Key Institutions with responsibility in civil emergencies. These are 13 Ministries, the Albanian Academy of Science and the Albanian Red Cross. Five ministries have responsibilities for the policy for prevention.

The leading *Ministry is that of Agriculture, Food and Consumer Protection*. It has a wide range of prevention responsibilities, including for flood, landslide, dam-burst, epidemic, and wild/forest fire risk reduction. The *Ministry of Public Works and Transportation* is the principal structure that shoulders core problems as maintenance, repairing and construction of highway and railroad infrastructures, ensures support and organises assessments of damages and resistance of structures in residential and public facilities, water-supply facilities, and channels. The *Ministry of Economy, Trade and Energy* is responsible for collecting information in relation to emergency needs to determine intervention in public investments of critical infrastructure. The *Ministry of Health*, the *Ministry of Labour, Social Affairs and Equal Opportunities* and the *Ministry of Finance* also have some limited responsibilities.

Under the already cited AL-DRMAP project, an National plan of revisions of building code has been developed. A special decree has been issued by MOPWT (Ministry of Public Works and Transport) to integrate Eurocode 8, 0-3 into national legislation based on the national plan. Key sections of the Eurocode 8 for earthquake resistance were prepared with project funds and Eurocodes 0, 1, 2, and 3 were transferred with MOPWT budget.

As part of IPA (Instrument of Pre-accession Assistance) Adriatic Cross-border Programme – Under this EU program (2007-2013) Albania participated in two projects – ADRIARadNet and HAZADR.²²⁵² The HAZADR project – Strengthening common reaction capacity to fight sea pollution of oil, toxic and hazardous substances in Adriatic Sea, was about the common training of personnel. The main goal of

²²⁵²

http://www.adriaticpacbc.org/index.asp?page=interna&level=project_list.

the project was the setting up of a training and research centre for combating oil spills, and spills of hazardous and noxious substances – with the task of training personnel, especially response teams, involved in the implementation of contingency plans. The total budget was over 3M Euro, of which over 217 thousand for Albania.

1.2.4 Policy for Preparedness

The National Civil Emergency Plan defines preparedness as “undertaking of any measures to prepare people and property to withstand as effectively as possible, the effects of an identified potential threat or hazard.”

The policy for preparedness is based on several pillars:

- Institutions and Civil Emergency Plans
- Sectorial and Contingency Plans
- Identifying Hazard and Risk
- Awareness of Risk
- Monitoring and Trigger Mechanisms
- Early Warning
- Emergency Public Works and Other Measures
- Seasonal Preparedness and Protection Measures
- Clear roles and responsibilities at National, Prefekturë and Municipality levels
- Developing Preparedness and Protection Priorities for Albania

Plans

Departments and organisations with responsibilities for civil emergency issues are obliged to draw up their own civil emergency plans to meet their responsibilities and obligations under NCEP.

In addition to that, specific problems, which may be of national, regional or local importance are treated by Sectorial Plans. The disaster management structure at the central, regional and local level is responsible for developing Contingency Plans for specific disasters. There are also specific plans developed to cover important Installations and facilities pertaining to private or public juridical or physical subject.

Early warning

Under this platform is enabled the Early warning System for Floods and Early Warning System for Wildfire and daily bulletins on the related risks for all territory are produced by IGEWE and disseminated to all stakeholders.

Most of the international assistance programs in which Albania participated were focused of DRR preparedness.

Under the AL-DRMAP project, the CRIF (Catastrophic Risk Insurance) Facility has been established and catastrophic insurance infrastructure and regulatory framework are in place. More than half of the existing private insurance companies in Albania have already registered with the Europe Re. A regional arrangement, especially operationalization of the Europe Re (the reinsurance company under SEE-CRIF), has also been completed as of the end of March 2014. Comprehensive earthquake and flood insurance packages have been fully developed with view to provide homeowners and SME's with high credit quality coverage. An innovative underwriting platform and consumer education website on disaster risk and disaster risk insurance have been developed and is made available to the government and the public.

Under The Global Facility for Disaster Reduction and Recovery (GFDRR) initiative, managed by the World Bank, 40 automated hydro-meteorological stations in Albania were modernized.²²⁵³

As part of IPA (Instrument of Pre-accession Assistance) Adriatic Cross-border Programme – Under this EU program (2007-2013) Albania participated in the project ADRIARadNet²²⁵⁴ - ADRIAtic integrated RADar-based and web-oriented information processing system NETwork to support hydro-meteorological monitoring and civil protection decision. The total budget was over 2,8M Euros, of which over 350 thousand for Albania.

With the financing of the EU under UNESCO, Albania was included in IncREO Project - EarthObservation (EO)-based map for disaster risk reduction (floods)²²⁵⁵. The goal of the project is to increase disaster mitigation and response preparedness through simulations²²⁵⁶.

1.2.5 Policy for Response

The NCEP defines response as “actions of forces and means for rescuing people’s lives, livestock and property in a territory stricken by a disaster, as well as providing the basic living conditions for the population affected by disaster.”²²⁵⁷

The plan distinguishes between four stages of the response phase, namely:

- Stage 1: Alert. All measures on first notification or information on an emergency situation and serves as a signal to increase readiness.
- Stage 2: Standby. Readiness of all post notification measures or information that an emergency situation or disaster is imminent or has started.
- Stage 3: Activate. Activation arises when an emergency situation has occurred.
- Stage 4: Stand Down. Stand Down represents the closure of the Response Phase, irrespective of how many previous stages have actually occurred.

Albania has a National Operations Centre for Civil Emergencies (NOCCE), under the General Directorate of Civil Emergencies to which all new information relating to a real or potential civil emergency situation must be addressed, where it will be collected and analysed.

NOCCE inform the Director of the General Directorate of Civil Emergencies who informs the Minister of Interior each emergency situation or possibility for occurrence, and depending on the situation issue the activation of the National Civil Emergency Service System (NCESS).

NCESS comprises structures, human and material resources, governmental and nongovernmental, which are involved in the response to civil emergencies. NCESS is composed of both permanent and temporary structures, depending on the activation of the capacities to respond to emergencies. The activation of the NCESS ensures an appropriate and immediate response to all the types of potential emergency situations, whether or not the Alert stage has occurred.²²⁵⁸

Roles and responsibilities in the response phase are listed by the NCEP. At Regional or local level, the Civil Emergency Officer, Prefect or designated official will commence similar stages of activation to support and complement the NCESS. Public information will be provided by the NOCCE. Any requests

²²⁵³ <https://www.gfdr.org/area/Pillar3>.

²²⁵⁴ http://www.adriaticpacbc.org/index.asp?page=interna&level=project_list.

²²⁵⁵ UNESCO Country Programming Document for Albania 2014-2017, Second edition - January 2015, p.33.

²²⁵⁶ <http://www.increo-fp7.eu/project-overview/>.

²²⁵⁷ National Civil Emergency Plan, p.31.

²²⁵⁸ National Civil Emergency Plan, pp.32-35.

for international assistance are made when it is decided that the level of needs cannot be met from national resources and capacities. International Appeal is prepared by Inter-Ministerial Committee of Civil Emergencies.

The NCEP details financial considerations in the response phase (immediate, secondary and tertiary financial implications), as well as four series of standard assessment tools for the purposes of analysis and reporting. These include: First Notification Form (Prepared at Prefect Level); First Disaster Information Report (Prepared by Joint Assessment Team); Disaster Situation Report to OCHA; Request for Line Ministries in Case of Emergencies.

1.2.6 Policy for Relief and Recovery

All the line Ministries and agencies have duties and responsibilities during the recovery phase. It starts with a declaration that the civil emergency situation is over and that the affected public and organisations can start to return to their normal situation.

The NCEP envisages the following steps to be taken in the recovery phase:

- Removal or Reduced Force of Primary Hazard
- Stabilization of Risk of Secondary Hazards
- Procedures for Safe Return or Resumption of Normal Access
- Restoring Essential Public Utilities
- Activities related to Destroyed and Damaged Structures.

1.3 Financing

1.3.1 Investing in preparedness

National financing

The Law on Civil Emergency Services defines (Art.32) that the state budget is the primary financial resource for civil emergency planning and crisis management, as well as that ministries are to be allocated an annual budget for civil emergency planning and response within their respective field of activity.

Specifically, four types of budgetary provisions are available: the civil emergency budget of the Ministry of Interior, the emergency budgets of local government, reallocated budgets of line ministries and the Council of Ministers Reserve Fund.²²⁵⁹

The Civil Emergency item (within the Ministry of Interior's budget) in the State Budget for 2014 amounts to ALL 788.8 mln, app. EUR 5.62 mln.²²⁶⁰

Most of the funds are allocated for disaster preparedness and post-disaster recovery. These budgets are primarily intended for emergency situations, although there are training and development budgets within line ministries. However, the funding for disaster preparedness and response in Albania is limited, particularly at the local level.²²⁶¹

²²⁵⁹ IPA Beneficiary Needs Assessment Albania, pp.10-11.

²²⁶⁰ Data is available in Albanian at www.financa.gov.al/al/legjislacioni/buxheti-thesari-borxhi/buxheti/buxheti-ne-vite/buxheti-2014.

²²⁶¹ IPA Beneficiary Needs Assessment Albania, pp.10-11.

With respect to personal obligations, the NCEP makes note that the lack of buildings insurance in Albania means that the home, security and livelihood of a previously self-reliant household can be instantly destroyed by a civil emergency event, leaving them destitute and dependant on state and humanitarian assistance.²²⁶²

International assistance

Due to the limited national financing, most of the investments in DRR are funded by international projects (programs).

The international assistance and cooperation could be divided into two groups:

1. Disaster Mitigation and Preparedness programs/ Regional coordination and cooperation
2. Disaster response assistance

Albania has been a beneficiary of several disaster mitigation/ preparedness projects²²⁶³. These are: AL-DRMAP project, GFDRR initiative, Program for Prediction, Prevention and Mitigation of Forest Fire and Flood risk in Albania, DesInventar, IPA (Instrument of Pre-accession Assistance) Adriatic Cross-border Programme – (ADRIARadNet and HAZADR projects) and the IncREO Project (with the financing of EU, under UNESCO).

At least important as these projects is the Disaster Response assistance received by NATO and EU countries.²²⁶⁴

1.3.2 Investing in consequence management

The Law on the State Budget allocates a yearly reserve fund. The Council of Ministers is entitled to use this fund in the event of a civil emergency situation, as well as for disaster reduction measures. In Albania, the fund amounted to app. USD 17 mln in 2006, which, according to ISDR estimates, could cover only 0.3% of damages from an earthquake with a return period of 250 years.²²⁶⁵

Within the AL-DRMAP project, Albania's membership in SEE Catastrophic Risk Insurance Facility was secured. Operationalisation of Europe Re was completed as of the end of March 2014. As a result, comprehensive earthquake and flood insurance packages were developed with view to provide homeowners and SMEs with high credit quality coverage.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

In Albania, the institutions responsible for ensuring thorough review following a major emergency situation are the General Directorate of Civil Emergencies, the Prefekturë Commission for Civil Emergency Planning and Response, the Local Commission for Civil Emergencies and the Civil Emergencies Commissions in the line Ministries. Following operational debriefings to be performed as soon as possible after the end of the crisis situation, a review process is launched, which normally involves inputs from all stakeholders including the affected population and organisations. The review

²²⁶² National Civil Emergency Plan, p.45.

²²⁶³ Cited earlier in this report (pp. 18-22).

²²⁶⁴ See Chapter 5 on capabilities in this report.

²²⁶⁵ Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of South Eastern Europe.

should be documented and shared with stakeholder agencies in a round table meeting. Such review is an essential aspect as it can accurately highlight issues that could be incorporated in future planning.

The review's aim is to provide clear action points to be taken by stakeholders in order to prevent and to mitigate future crisis events, as well as to improve preparedness and protection. The format of the review has to be as comprehensive as possible and to take into account the following:

- The status of prevention and mitigation plans before the event, and impact of any prevention and mitigation measures used;
- The effectiveness of preparedness, protection and response plans during the event;
- Effectiveness of communications procedures;
- Implementation of the National Civil Emergency Service System;
- Effectiveness of early warning and public information procedures;
- Effectiveness of national and local level civil emergency coordination arrangements, including acquisition and analysis of information, decision making and provision and dissemination of information to concerned agencies and to the public;
- Effective undertaking of roles and responsibilities by identified stakeholders;
- Effective drawing on national capacities and their use in response;
- Information flow and effectiveness of coordination at National and local levels;
- Speed and effectiveness of combined responses for: Search and rescue (SAR), Mass Casualty Management, evacuation, providing safe access, clearing roads and transport access, making safe and restoring essential services.
- Effectiveness of arrangements for emergency health, safe shelter, food and non-food assistance;
- Use and effectiveness of international assistance arrangements and relationships with international organisations;
- Impact and value of training programmes in strengthening response;
- Effective provision of information and resources for recovery;
- Special additional factors presented by this civil emergency situation;
- Conclusions and action points to be followed by identified responsible stakeholders;
- Presentation of the review to the Technical Consultative Commission.²²⁶⁶

The IPA Beneficiary Needs Assessment study on Albania reveals that:

The current legislative system does not have any law that defines a possible disaster recovery process or how to conduct a post disaster needs assessment. After each event, institutions in charge realize systematic reports for their field of operation but no detailed analysis of socio-economic and environmental impacts and losses is conducted. The first efforts to prepare standard post event reports are underway, but capacity is presently lacking to conduct more detailed analyses of this nature.

In order to unify the various reports on disaster situations prepared by various institutions, the Ministry of Interior has developed a series of standard assessment tools to be applied: a First Notification Form (prepared at the Prefect level), the First Disaster Information Report (prepared by a Joint Assessment Team), a Disaster Situation Report to OCHA, and Request for Line Ministries in Case of Emergencies.

²²⁶⁶

National Civil Emergency Plan, pp.49-50.

The Rapid Needs Assessment Reports are practical tools presented in the Civil Emergency Manual that have to be completed by the respective authorities to help them get immediate information on the level of damage and the needs.

In the case of a large-scale civil emergency situation, a Joint Assessment Team undertakes a Rapid Needs Assessment. However, prior to this, any contribution should be made by the NOCCE, the Qark Civil Emergency officer or Prefect and communal and municipal authorities using the same format. In extreme situations, initial interventions (mass medical care and other priority activities such as evacuation, search and rescue) can be conducted before or during the Rapid Needs Assessment. Successive follow-up assessments will be made using the same approach, but with greater detail as information becomes available and the situation stabilizes.²²⁶⁷

1.4.2 Departmental Lessons Learned systems

There is no information about a departmental lesson learned system. Although, the fact is that Albanian DRR organizations have gained experience in the last years and their coordination (both inter-agency and internationally) had been improved.

1.4.3 Centralised (national) Lessons Learned system

The action-points or recommendations that have been agreed in the evaluation review are used to create follow up steps. It is the responsibility of the Department for Civil Emergency Planning and Response to pursue the implementation of these action points and recommendations, which should be reported back to the Technical Consultative Committee.

The follow up steps may include:

- Amendments, revision or updating of the National Civil Emergency Plan;
- Amendments to existing measures and new measure to be introduced in:
 - Prevention and Mitigation
 - Preparedness and Protection
 - Response
 - Recovery
- Changes to the operational structure of the Civil Emergency System;
- Revision of specific issues within civil emergency management, such as; early warning, public awareness, primary roles and responsibilities, coordination mechanisms, links with international response mechanisms and training initiatives;
- Specific factors to feed into local and national development plans, including those with international support.²²⁶⁸

1.4.4 International exchange for Lessons Learned

A number of international projects provide (policy) recommendations concerning the whole Albanian crisis management system or elements of it.

²²⁶⁷ IPA Beneficiary Needs Assessment – Albania, p.12.

²²⁶⁸ National Civil Emergency Plan, p.50.

Back in 2008, the United Nations Disaster Assessment & Coordination (UNDAC) issued an Assessment and recommendations following the Gerdec Explosions. The recommendations concerned immediate actions to be undertaken to mitigate the consequences of the blast (such as Immediate clearing of UXOs in the three identified zones), as well as such with a long term effect, e.g. update of the National Civil Emergency Plan.²²⁶⁹

Importantly, a series of reports within SEEDRMAP provide important recommendations with respect to the crisis management system in Albania. For example, a report on “The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe” concludes that the capacity of Albania to respond to major events is burdened with procedural operations which could be detrimental to effective emergency responses.”²²⁷⁰ Further on, the report expressed doubts as to the effectiveness of the chain of command, and notes that significant capacity gaps exist in terms of quantity and quality of resources.

In 2010, a capacity assessment mission for Albania was implemented at the request of the regional project for South-East Europe and Turkey on disaster risk management. Similar missions were also conducted for Bosnia and Herzegovina, Serbia, Turkey, Macedonia, Kosovo and Montenegro out of eight of the Instrument for Pre-Accession Assistance (IPA) beneficiaries of the project. The assessment was meant to complement the needs assessments conducted in all eight IPA beneficiaries of the project conducted in 2010 by both a regional and local consultant in each location.²²⁷¹ The purpose of the capacity assessment was to identify capacity gaps related to risk reduction, understand desired capacities and propose recommendations on how these capacities can be achieved.

The regional cooperation, including exchange of lessons learned is one of main goals of international projects of which Albania is a beneficiary. The most important of these projects is under *IPA (Instrument of Pre-accession Assistance) Adriatic Cross-border Programme – HAZADR*²²⁷² – Strengthening common reaction capacity to fight sea pollution of oil, toxic and hazardous substances in Adriatic Sea. The main goal of the project is the setting up of a training and research centre for combating oil spills, and spills of hazardous and noxious substances - with the task of training personnel, especially response teams, involved in the implementation of contingency plans. The total budget was over 3M Euro, of which over 217 thousand for Albania. The focus of the projects is namely the facilitation and development of regional Lessons learned network.

1.4.5 Regular policy reviews

Albania has not yet established a tradition of regular policy reviews. There isn't such procedure in the legislation. The National Civil Emergency Plan hasn't been reviewed since 2004, despite the fact that the intensity of natural disasters increased and the country became a member of NATO.

²²⁶⁹ Assessment and recommendations following the Gerdec Explosions.

²²⁷⁰ The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe, available at http://www.unisdr.org/files/9346_Europe.pdf.

²²⁷¹ Disaster Risk Reduction Capacity Assessment Report for Albania.

²²⁷² Already cited in this report.

1.5 Resilience

The term resilience is not used in relevant legislation in Albania.

However, the country has been part of international projects aimed, among other goals, to strengthen particular elements.

1.6 Information sharing and data protection

No information was identified during the timeframe of the study to support research in this respect.

2 Legislation

The constitution of the Republic of Albania provides as the main judicial starting point in civil emergencies and the main principles for organising civil emergencies are stated. Part sixteen – “extraordinary measures”, Articles 170 and 174 of the Constitution of Albania addresses issues related to emergency and disasters, the acts issued and the measures taken under these circumstances.²²⁷³

In general, the civil emergency planning is established under Albanian Law 8756 on Civil Emergency Services of 26 March 2001 and governed by the Albanian National Civil Emergency Plan of December 2004.

The Law 8756 focuses primarily on response rather than on prevention and risk reduction, while the National Civil Emergency Plan (NCEP) covers in detail all stages of the disaster cycle, including prevention, mitigation and preparedness. The NCEP does not feature individual sectoral plans, but is nonetheless linked to sectoral strategies and contingency plans such as the National Environmental Action Plan, the Strategy related to Forest Fires, the Contingency Plan related to Radioactivity or the Initiative on Land Use and Watershed Management.

Other laws include the Law on Fire Protection and the Law on Local Government, which are completed by legal provisions dealing with environmental protection, environmental impact assessments, protection and development of forests and pasture, agriculture and rural area development, safety of dams and dykes, public health protection, urban planning and construction, etc. With regard to forest fires, the Government has issued extensive legislation that defines compulsory prevention measures for the protection of forests, such as the construction of fire prevention barriers, biological measures, construction of forest monitoring towers, the strengthening of the seasonal forest patrol system, prohibition of igniting fires in forests, etc.²²⁷⁴

2.1 Crisis (emergency, disaster) management concept

The National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018 of the Republic of Albania aims at fulfilling five Strategic Components and priority activities:

- Strengthen national, prefect and local institutions and their regulatory frames;
- Compile and organize risk information and strengthen early warning systems;
- Increase national awareness, knowledge and facilitate the exchange of information on disaster risk reduction and civil protection;
- Increase preparedness, emergency services and recovery capacities;
- Increase financial protection.

The Strategy includes recommendation regarding the required financing and highlights the importance of regional and international cooperation. The Strategy contains a Results Table with the

²²⁷³ Albanian HFA Monitoring Report 2011-2013, General Directorate of Civil Emergencies of Albania.

²²⁷⁴ IPA Beneficiary Needs Assessment – Albania, pp. 8-9.

priority investments, responsible agencies for each activity and timeframes for their implementation.²²⁷⁵

The Strategy provides the basis for enhanced coordination between national institutions, sustained resourcing and even behavioral change, in particular, regarding the need to address disaster risk in national development and integration plans, the work of line Ministries, regions (Prefekturës), communes and cities. The Strategy builds on and strengthens already existing plans, institutions and regulatory frames in Albania and further recognizes the role of the private sector and civil society.²²⁷⁶

*The Strategy allows Albania to align its disaster risk reduction work with, and to position itself at the forefront of, regional and international agreements such as the Hyogo Framework for Action 2015: Building the Resilience of Nations and Communities to Disasters. The norms and standards to be elaborated under the Strategy for Albania, such as building codes and standard centralized emergency numbers, will also contribute to Albania's accession discussions with the European Union.*²²⁷⁷

2.2 General crisis (emergency, disaster) management law

The Civil Protection system and the structure of civil emergency planning are established under Albanian Law 8756 dated 26 March 2001 and governed by NCEP of 3 December 2004.

Law 8756 on Civil Emergency Services aims to prevent, mitigate and remedy any damage inflicted on people, animals, property, cultural heritage and environment by emergencies; to provide conditions for public institutions, economic entities and the population for the transfer from ordinary living and working conditions to an emergency situation with the smallest possible losses, for the keeping of order and preservation of human lives against the effects of an emergency; to guarantee the use of available state resources in order to ensure public security, maintain the continuation of the national economy, localise the emergency areas and alleviate the effects thereof.²²⁷⁸

The NCEP is the most important document regarding civil emergencies. It aims at improving the civil emergency structure of Albania, clarifying the division of responsibilities, and planning the best use of limited state resources to identify gaps and avoid duplication, in accordance with the established legal base.²²⁷⁹

The aim and objective of the Plan is to be an instrument which supports the Law on Civil Emergency Services. The National Civil Emergency Plan draws together and clarifies the roles and responsibilities of all stakeholders. This aims to channel the flow of relevant information, to strengthen decision making, and through coordination, to reinforce the capacity to respond through all phases of the disaster cycle. The National Plan is essentially a coordination tool.²²⁸⁰

²²⁷⁵ National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018, Republic of Albania, Draft for consultation – version 19 June 2014.

²²⁷⁶ Ibid., p.5.

²²⁷⁷ Ibid., p.5.

²²⁷⁸ Law Nr. 8756 on Civil Emergency Services, dated 26/03/2001, art.1.

²²⁷⁹ National Civil Emergency Plan, p.5.

²²⁸⁰ National Civil Emergency Plan, p.6.

The National Civil Emergency Plan is an overarching initiative bringing together all Albanian and international stakeholders. Many ministries, directorates, and institutions have developed and maintain their own specific disaster preparedness plans.²²⁸¹

2.3 Emergency rule

Decision No 664 regarding Criteria and Procedures of Proclamation of the Civil Emergency Situation, dated 18 February 2002 states that civil emergency situation can be announced in a part of the territory of the country, or in the whole territory of the country.

The civil emergency situation is proclaimed when the possibilities and resources possessed in normal conditions cannot respond to the consequences deriving from the disaster. For proclamation of the emergency situation, the following data is necessary:

- The territorial extension of the damaged zone;
- Impact of the damages on distortion of the community normal life balance;
- Scientific data from the respective institutions on the concrete case of the disaster.

There are specific procedures that are set out in the document, for proclaiming civil emergency situation in case of an earthquake and floods. The procedures followed for proclamation of the civil emergency situation in cases of earthquakes are:

- The seismologic institute, within two hours, submits to the General Directorate of Civil Emergencies the preliminary registered data, and updates the data on a periodical basis, until termination of the seismic strikes;
- Civil Emergency Planning and Response Department presents the respective report to the Minister of Local Government and Decentralization after receiving the data the preliminary assessment of the damages caused from the seismologic institute, commune/municipality and the region;
- After collecting the necessary data, the Council of Ministers, decides on the proclamation of the emergency situation in the respective zones.

In cases of floods, the civil emergency situation can be proclaimed in the following situations: the water level reaches critical points in some measured zones; one or more rivers that run through the area have run out of the river beds, causing dangerous situations; reservoir dikes and lake dams are heavily damaged; the life of the civil population, of the livestock and of the property is seriously damaged.

The main criteria for proclamation of civil emergency on disasters caused by people, epidemics, industrial accidents and radio-active radiations, etc. are defined case by case according to the effects that will be produced in the stricken zone, and on the basis of existing possibilities for disaster response in the local government units’.

The proposal for proclamation of the civil emergency in these cases is undertaken by line ministries, according to the specifics of the occurring event and depending on the competencies and functions

²²⁸¹ Vademecum Civil Protection – Country Profile – Albania.

covered, in cooperation with the respective institutions and local government bodies affected by the disaster.²²⁸²

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Decision No 532 on Liabilities and Tasks of the Civil Emergency Planning and Response Department, dated 1 August 2003 defines the specific responsibilities of the General Directorate of Civil Emergencies. They include:

- Cooperating with the other institutions for drafting and updating of the national plan on the civil emergency response;
- Drafting plans for completion and updating of reserves of civil emergencies in compliance with the national plan of civil emergencies;
- Management of the civil protection system and coordination of state and non-state structures connected with it;
- Preparation, pursuance and implementation of sub-statutory acts on planning and response against the civil emergencies;
- Organization of international bilateral and multilateral co-operation relations on civil emergency issues, fire protection and humanitarian aid.

The specific tasks of the General Directorate of Civil Emergencies include:

- Implementation, together with other institutions, policies of the Council of Ministers in the field of civil emergencies planning for response, fire protection and rescue and helps in creation, use, and distribution of reserve emergency goods, including food, material and monetary goods;
- Cooperation with domestic institutions and public enterprises to assess the emergency situations on the basis of the national plan of civil emergencies, and organisation of the work for updating the plan on a periodical basis;
- Monitors continuously the situation of protection from fire and the civil emergency situation all over the territory of the country, in the region and wider, and plans preventive measures;
- Plans funds for studies from the public enterprises for the civil emergency prevention and response;
- Prepares every six months a report for the overall situation of civil emergency planning and response;
- Provides all the necessary data on threatening risks and emergency situations to the Inter-ministerial Committee of Civil Emergencies, and provides possibilities for material support of operations for civil emergency response;
- Plans and defines the rules according to which the financial and material sources are used in the cases of civil emergencies;

²²⁸² Decision No 664 regarding Criteria and Procedures of Proclamation of the Civil Emergency Situation, dated 18 February 2002.

- Coordinates the work of central institutions with units of the local government on the civil emergency response;
- Coordinates the organization and equipment of the active and supportive structures of the civil emergency service;
- Requests data regarding the civil emergency response, communicating directly with the standing and temporary structures of civil emergency service in the central government level, in a regional and municipality/commune level;
- Organizes, implements and monitors the data system in a national level on the civil emergency situations;
- Enters into contracts with associations and bodies that offer assistance for realization of the tasks given in the plan on civil emergency response and on creation of reserves;
- Organizes and leads conferences, seminars and workshops for the national, regional and local civil emergency staffs;
- Processes the public education programs and of training of state and non-state structures in the field of civil defence;
- Guides the responsible structures on the way of realization of the public opinion awareness and sensitization on civil emergencies and fire fighting;
- Coordinates the work for assessment of the caused damages and rehabilitation from natural disasters or other disasters in compliance with the respective legal and by-law acts;
- Controls application of the protective and preventive measures from state and non-state subjects all over the territory of the country for civil emergency responses and fire fighting;
- Controls the way how the material and financial sources allocated by the state budget, or by other state bodies in the case of civil emergencies for the central and local bodies are used;
- Controls distribution and way the reserve emergency goods are used, making sure that distribution and usage is made in compliance with the National Plan on Civil Emergencies and with the legal and sub-statutory acts in power;
- Organizes inter-ministerial monitoring groups on management of the civil emergency system.²²⁸³

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Law 8756 on Civil Emergency Services sets out the specific responsibilities of the Inter-Ministerial Committee of Civil Emergencies, the Ministry of Interior,²²⁸⁴ the Department for Civil Emergency Planning and Response, the technical consultative Commission, other public institutions and ministries, and defines the organisation of civil emergency planning and response on prefekturë (regional), municipality and at commune level.²²⁸⁵

²²⁸³ National Civil Emergency Plan, pp.10-11.

²²⁸⁴ Previously Ministry of Local Government and Decentralization.

²²⁸⁵ Law 8756 on Civil Emergency Services, Chapter II, Chapter III.

Further, the National Civil Emergency Plan specifies the organization of the National System of Management of Civil Emergencies in Albania at national, prefekturë and at municipal and commune levels.

It is the responsibility of authorities at prefekturë, commune and municipal levels to develop contingency plans of their own, which all feed into the National Civil Emergency Plan, and the procedures, roles and responsibilities which it describes.

Municipalities and communes have responsibility for preparedness, planning and undertaking civil emergency response for situations developing in their territories. Every municipality and commune, establish and maintain a system of:

- Early warning and notification of key structures,
- Alarm and evacuation of population,
- Squads and other active structures prepared to prevent, mitigate and respond to civil emergency situations,
- Undertaking and administering rehabilitation activities for affected area.²²⁸⁶

According to the Law, the Council of Minister calls for the creation of the Inter-Ministerial Committee of Civil Emergencies and appoints the appropriate staff for it. The Committee is responsible for coordinating the work of all other civil emergency services, decides on the usage of state resources to overcome the situation and in case of a national civil emergency appoints the leadership to manage the coordination.

The Ministry of Interior is responsible for a range of managerial and planning duties in cases of an emergency including the development and implementation of the national plan on civil emergencies. The Ministry also monitors, on a national level, the information system on civil emergencies and reports to the Council of Ministers every 6 months regarding the level of civil emergency preparedness of structures throughout the country. Many of the aforementioned duties of the Ministry are shared, if not regulated, by the Department for Civil Emergency Planning and Response, which is an organ established within the Ministry. The Department plays an important coordination role in the crisis management system and ensures the coordination between national, prefecture, commune and municipal level civil emergency structures.

The Department's role is supported by the Council of Minister's Decision No. 532 on the "Responsibilities and Duties of the Department of Planning for and Overcoming Civil Emergencies" adopted in August 2003.

The Director of the Department has the authority to call the Technical Advisory Commission of Civil Emergencies which includes specialists from ministries, various institutions and operational forces throughout the country. The Technical Advisory Commission has another source of legal basis, namely the Council of Minister's Decision No. 663, the "Constitution, Functioning and Responsibilities of the Technical-Advisory Commission of Emergency Specialists", adopted in December 2002.²²⁸⁷

²²⁸⁶ Vademecum Civil Protection - Country Profile – Albania.

²²⁸⁷ Comparative Research of Emergency Response Legislation: Albania, Macedonia and Bosnia and Herzegovina, p.5.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Decision 533, dated 1 August 2003, on Citizen Involvement on Civil Emergency Prevention and Response defines the involvement of citizens in crisis situations. It specifies that in case of civil emergencies, the head of the operation at central/regional level, requests the region's prefecture the engagement of the capable citizens, according to the needs scale. The Prefect, in cooperation with the mayor/commune head, orders activation of citizens and plans their involvement in the operational structures, functioning for civil emergency prevention and response in the region's territory.

The Regional Prefect, through the civil registration offices in municipalities and communes, ensures data and keeps records on the citizens living in the territory of the region, aged 18 to 55 for the women and 18 to 60 for men.²²⁸⁸

According to article 24 of the Law 8756 on Civil Emergency Services, the service of volunteers is organised for responding to emergencies. Volunteers may be any Albanian citizens over 18 years old who have received basic training in responding to emergency situations and accept to participate. During emergency situations foreign citizens can also be admitted to participate as volunteers.

Persons who volunteer to participate in rescue operations have the rights for the period they are active in the rescue operation to keep their job, to receive full payment from their employers and to insurance in case of an accident.²²⁸⁹

Economic entities and institutions, which in the pursuance of their activities use, produce, transport or store hazardous substances are obliged to plan, organise and implement, on their own expenses, services for responding to emergencies within their area of activity.

In addition they have to develop plans for emergency situations and implement preventive measures within their area of activity; to notify their personnel as well as the respective municipal or commune authority about an imminent risk; to organise, when necessary, evacuation of their employees, set up their own organisation for responding to an emergency situation within their area of activity; and to provide training to their employees. The Council of Ministers determines in subordinate legal act what constitutes hazardous substances, which create threat of emergency situations.²²⁹⁰

2.7 Legal regulations for international engagements of first responders and crisis managers

The Council of Ministers has the overall responsibility for civil emergency planning and response in the Republic of Albania. Furthermore, it is responsible for arranging and specifying the procedures for international assistance in the event of emergencies.²²⁹¹

The Directorate for Civil Emergency Planning and Response can request the assistance of national and international organisations, nongovernmental organisations and private volunteer organisations to deal with civil emergencies.²²⁹²

²²⁸⁸ Decision no 533, dated 1.8. 2003, on Citizen Involvement on Civil Emergency Prevention and Response.

²²⁸⁹ Law 8756 on Civil Emergency Services, Chapter IV, art.24.

²²⁹⁰ Law 8756 on Civil Emergency Services, Chapter V, art. 30.

²²⁹¹ Ibid., Chapter I, art. 5.

3 Organisation

3.1 Organisational chart

The crisis management system in Albania consists of permanent and temporary structures at central level, prefekturë (county) and local level. Through these structures, each ministry, department or institution, has specific responsibilities for all the stages of the emergency management cycle.

At national level the Council of Ministers chairs the national management system of civil emergencies in Albania. It approves the strategies, policies and programs which aim at prevention, mitigation, preparedness and response to civil emergency situations. The Council of Ministers pronounces the state of civil emergency in a given area or all over the country. After the pronouncing of the state of civil emergency, the Council of Ministers establishes the Inter-Ministerial Committee of Civil Emergencies. The Inter-Ministerial Committee of Civil Emergencies coordinates the activities of all the institutions involved in all the stages of the response to the state of civil emergency. The Inter-Ministerial Committee involves key ministers (i.e., the Minister of Interior, Minister of Defence, Minister of Environment and Minister of Health) and usually acts for a period of 10 days.

The Ministry of Interior implements the policies of the Council of Ministers in the fields of planning and dealing with civil emergencies. The Department of Civil Emergency, Planning and Response is the key institution for disaster management. Through this permanent structure the Ministry monitors the state of the emergency in the entire territory of Albania, whereas in calm situations and in case of low scale emergencies cooperates with central institutions and structures, involved in the issues of civil emergencies. This Department has three subordinate units: Directorate for Civil Emergency Planning and Response,²²⁹³ Directorate of Fire-fighting and Rescue and the National Operations Centre for Civil Emergency.

At prefekturë or regional level, the regional prefect is responsible for planning and dealing with civil emergencies. Under the chairmanship of the prefect, the Commission of Planning and Responding to Civil Emergencies is established with the task of coordination of the activities of the regional authorities and volunteer organisations for planning and dealing with the emergency situation. At each of the 12 prefekturës in Albania, a civil emergency officer is appointed.

At local, municipality and commune level, the mayor or the head of commune is responsible for planning and responding to civil emergencies in the respective municipality or commune. Under the chairmanship of the mayor or the head of commune, the Commission of Planning and Responding with Civil Emergencies is established, and its main task is to coordinate all activities of the local government unit and volunteer organisations, responsible for planning and responding to emergencies.²²⁹⁴ Every municipality and commune in Albania has a designated official with responsibility for civil emergency matters, who benefits from instruction in the standardised training

²²⁹² Ibid., Chapter IV, art. 25.

²²⁹³ National Civil Emergency Plan, p. 9.

²²⁹⁴ Albanian HFA Monitoring Report 2011-2013, General Directorate of Civil Emergencies of Albania, pp. 2-3.

curriculum, and through the frequent necessity for early warning, standby and response in many areas.²²⁹⁵

Each Ministry is responsible for the planning and management of civil emergencies according to their scope of activity. Their activities are incorporated in all the stages of the emergency management cycle and as appropriate they play a leading or supporting part, depending on the nature of the emergency.

The principal operational forces or active structures in Albania are comprised of the Armed Forces; Directorate of Fire Protection and Rescue (PMNZZH); The Ambulance Service; The State Police and other Police units; Directorate of State Reserves; Units specialised in mines and technical response; Monitoring and operational supportive structures.

These structures have specific roles, tasks and responsibilities for all the phases of the civil emergency management cycle, and it is essential that they cooperate closely with each other to provide the most effective response possible (Figure 3).²²⁹⁶

The National Operations Centre for Civil Emergencies is at the very centre of civil emergency management in Albania. It plays an active role through all four stages of civil emergency management.

The Albanian Red Cross is the main non-government organisation dealing with emergencies and crises. It is a voluntary organisation, which operates in all the Albanian territory with its Head Quarters

²²⁹⁵ International CEP Handbook 2009, pp. 12-13.

²²⁹⁶ National Civil Emergency Plan, p.11.

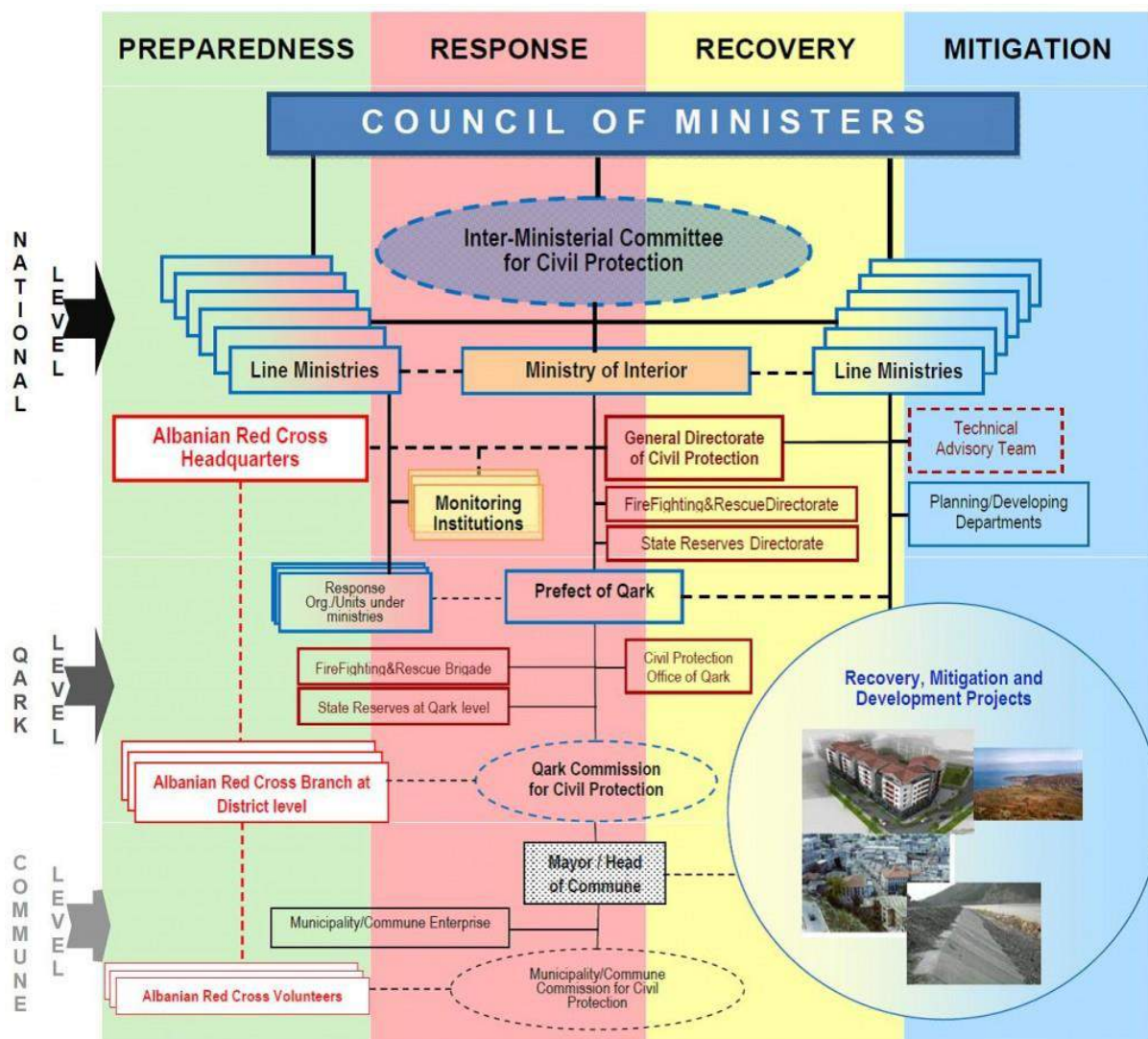


Figure 64: Organisational Chart of Civil Protection System in Albania.²²⁹⁷

based in Tirana, has 12 branches and 40 sub-branches at Prefekturë, Commune and Municipality and District levels.

3.2 Organisational cooperation

Inter-ministerial cooperation

The NCEP outlines the roles and responsibilities of line ministries and inter-ministerial bodies in the crisis management cycle.

The Inter-Ministerial Committee of Civil Emergencies coordinates the actions of all involved institutions through all the phases of response to civil emergency situations. The Inter-Ministerial Committee undertakes, among others, the following tasks:

- Prepares an appeal for international relief;

- Coordinates the actions and activities of national and local government institutions, the Albanian Red Cross, various volunteers and donors;
- Plans, and requests their engagement;
- Requests from the Council of Ministers to draw upon the State Reserves;
- Supervises the process of calculating and estimating the damage incurred by the disaster situation and identifies the potential means for the rehabilitation of the disaster-affected area, and propose possible solutions to the Council of Ministers;
- Appoints the Head of Operations, who shall be responsible for the administration and implementation of the civil emergency operation.

The Head of Operations is the leader of the response activities, and coordinates the management of the civil emergency operation in the affected area. The Head of Operations has the responsibility to:

- Supervises all the active operational and supporting structures necessary for responding to the civil emergency situation
- Is assisted by the Civil Emergency Management Team -task force that functions near the National Operations Centre for Civil Emergencies in managing the civil emergency operation
- Consults with heads of active operational structures, heads of monitoring structures and supporting operational structures, as well as other managers and specialists employed in the institutions involved in the National Civil Emergency Plan
- Follows the involvement of international relief teams and implement all necessary measures and requests to facilitate their intervention and achieve maximum results in civil emergency response
- Issue appropriate orders and directions for the management of operations of response to the civil emergency situation
- Briefs the Inter-Ministerial Committee and performs the tasks assigned by it
- Arranges the involvement of operational forces and other groups and individuals that are willing to contribute with their efforts to overcome the situation
- Cooperates with and coordinates the actions of other operations leaders at different levels and those of local government.²²⁹⁸

Upon a decision that the crisis response needs cannot be met by national resources and capacities, international assistance to Albania is requested. The international appeal is prepared by Inter-Ministerial Committee and procedures are implemented by the Ministry of Interior, Ministry of Foreign Affairs and Ministry of Defence. International assistance can be solicited, or offered, as financial contributions, in kind donations (food, tents, blankets, medical supplies etc.), or specialist services (Search and Rescue Teams, logistics handling teams etc.). The Head of Operations, Inter Ministerial Committee, closely supported by the General Director of Civil Emergency will determine the requirements for international assistance.

In case relief assistance arrives in the country unsolicited, it will be managed in the same way as requested assistance. Non-acceptance of unsuitable or unnecessary national and international assistance is the responsibility of Inter-Ministerial Committee/ Ministry of Interior advised by the Head of Operations and the Department of Civil Emergency.

²²⁹⁸

National Civil Emergency Plan, p.12.

The effective coordination of international assistance is challenging for the national response system. It is expected that United Nations Agencies, EU structures, NATO or individual countries will provide the necessary support to the coordination of relief efforts.

The Head of Operations is responsible for providing information on expected donor assistance to the Customs, Immigration and Quarantine Services to facilitate this process at entry points. In case of an emergency in neighbouring countries, involving displaced people crossing border, customs, immigration as well as quarantine must be prepared to facilitate the appropriate measures of the State.²²⁹⁹

International cooperation

Albania has signed numerous cross-border and international agreements for bilateral cooperation in regards to civil emergency support with Austria, Croatia, Greece, Italy and Turkey and also agreements are under discussion with Montenegro and the Former Yugoslav Republic of Macedonia.

Additionally, agreement for Cooperation in the Forecasting, Prevention, and Mitigation of Natural and Technological Disasters between the Governments of Austria, Croatia, Hungary, Italy, Poland, and Slovenia, was signed on 18 June 1992, to which Albania acceded later. Albania is also a member of the Disaster Preparedness and Prevention Initiative (DPPI), launched by the Stability Pact for South Eastern Europe.

Other multinational agreements in the area of civil protection, to which Albania is a party, include:

- Declaration on cooperation in disaster preparedness and prevention in south Eastern Europe signed 5 June 2002;
- Memorandum of Understanding on the Institutional Framework of the Disaster Preparedness and Prevention Initiative for South Eastern Europe, signed 24 September 2007;
- Council of Europe: Resolution 87(2): Open Partial Agreement on the Prevention of, Protection against, and Organisation of Relief in Major Natural and Technological Disasters, Albania signed the accession on the 15 May 1993;
- United Nations Environment Programme (UNEP) – Regional Seas Programme: Convention for the Protection of the Mediterranean Sea against Pollution. (The Barcelona Convention) Barcelona, 16 February 1976;
- Protocol concerning cooperation in combating pollution in the Mediterranean Sea by oil and other harmful substances in cases of emergency;
- United Nations Economic Commission for Europe (UN ECE): Convention on the Trans boundary Effects of Industrial Accidents, signed on 18 March 1992, ratified 05 January 1994.²³⁰⁰

On the civil-military cooperation side, EU and Albania signed a framework agreement for the participation of Albania in EU crisis management operations. On 5 June 2012 the European External Action Service and the Government of Albania inked an agreement, making Albania a partner in the area of the EU's Common Security and Defence Policy. The agreement set out a legal framework for possible future Albanian participation in the full range of EU-led military operations and civilian missions, and was a step towards more structured cooperation between the EU and Albania in the security field.

The World Bank is actively contributing to DRR goals in Albania, not only through the Albanian Disaster Risk Mitigation and Adaptation Project (under the UN International Strategy for Disaster Reduction (UN ISDR) supported by the Global Facility for Disaster Reduction and Recovery), but also

²²⁹⁹ Vademecum Civil Protection - Country Profile - Albania

²³⁰⁰ Vademecum Civil Protection – Country Profile – Albania.

through the Land Administration and Management Project and the Energy Community of South East Europe APL Programme (Albanian Dam Safety).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The National Civil Emergency Plan (NCEP) details seven procedures concerning the flow of information and notification in case of natural or man-made disasters. These concern the following cases:

- 1 Earthquakes;
- 2 Industrial Incident;
- 3 HAZMAT Transportation incident;
- 4 Sea incident;
- 5 Air incident;
- 6 Terrorist Attack;
- 7 Dam or Dyke collapse/

The NCEP contains²³⁰¹ a detailed description (checklists) of the National Civil Emergency Service System (NCESS) activation procedures during its different stages – Alert, Standby, Activate and Stand down. The responsibilities of the different elements of the national civil emergency system during the most critical phase of DRR – Response – are very strictly determined.²³⁰²

The specific example of the ammunition blast of 15 March 2008 shows how the Albanian crisis management system works in practice (see the box below).

4.2 Operations planning

NCEP stipulate that all departments and organisations, public, private sector and NGOs should have an emergency or contingency plan for protecting their property and assets in case of an emergency situation, as well as to provide the best possible service during the emergency situation, and the most rapid recovery afterwards. The outline and content of civil emergency, contingency and sectorial plans are provided in the Civil Emergency Manuals, which are part of the National Civil Emergency Curricula.²³⁰³

These plans could be:

- Sectorial Plans, covering specific problems, which may be of national, regional or local importance.
- Contingency Plans, designed by the disaster management structure of central, regional and local level for specific disasters, which may happen in the near future. Usually, contingency plans are used for transitory periods until the Emergency Plans are prepared. Contingency plans may be developed for seasonal or new risks/hazards or emergency that not covered by the main plan.

²³⁰¹ pp.32-35.

²³⁰² pp.36-40.

²³⁰³ NCEP, p. 27.

- Emergency Plans are specific plans developed to cover important Installations and facilities pertaining to private or public juridical or physical subject. These provide protection

Disaster response in the 2008 ammunition blast.

On 15 March 2008, a blast occurred in a factory located in the village of Gerdec, approximately 15 km west of Tirana. On site, there was an ongoing programme to dispose old military ordnance. The explosion sent artillery and mortar shells over nearby residential neighbourhoods destroying houses and shattering windows across the city of Vore and several villages. Many secondary explosions continued through the night until the early hours of the next day.

The Government declared the zone a “Disaster Area” and advised that inhabitants would not be allowed to return until the area was deemed safe. The Durres-Tirana highway was also closed to traffic whilst authorities assessed the situation. It was later reopened on the next day. Three risk zones (High, Medium and Low) were defined.

In accordance with the NCEP, an Inter-Ministerial Committee activated soon after the incident, chaired by the Deputy Prime Minister. The Albanian Armed Forces (AAF) and civil authorities cordoned off the area and started the search for victims as soon as it was relatively safe to access zone. Surface clearing in zone two and three is being carried out in cooperation by the AAF and Explosive Ordnance Disposal (EOD) teams/specialists from DanChurchAid, Italy and Sweden.

Approximately 600 evacuees from the affected areas are housed in three facilities in Durres – two owned by MoI and MoD and a privately owned hotel. The remaining affected population is staying with friends or relatives in the area of Vore according to the authorities and the Albanian Red Cross.

Through the Albanian Red Cross and local authorities, food and non-food items were made available. Furthermore, trauma counselling, teaching for primary school students and social activities for children were provided. Secondary school students as well as evacuees who had jobs were transported from the government facilities in Durres to and from Vore and Tirana on a daily basis.

The Albanian Red Cross engaged in a campaign for solidarity with the persons affected in Gerdec. 25 groups of volunteers were sent to help the persons injured, and their families, in the Military Hospital and the Hospital of Durres.

In addition to that, United Nations Disaster Assessment & Coordination (UNDAC) was deployed to Albania on 20 March to support the IMC.

The UNDAC team received the following mission objectives:

- to assess the overall situation with a focus on the needs;
- to evaluate the environmental impact of the explosion and provide analysis of samples of soil and ground water;
- to provide coordination support to the government of Albania;
- to provide the international community, UN and the government with short-mid- and long term recommendations.²³⁰⁴

The government carried out an initial damage assessment for all affected structures, refurbishing and livestock. The findings were forwarded the National Authority of Housing for economic evaluation. The evaluation was based on market prices. Discussions between the authorities and the affected population concluded that the affected population preferred to receive a cash grant for reconstruction rather than state-organized rebuilding. Between USD 600 and USD 2500 were made available per family. Further financial assistance was to be provided for domestic supplies. A special financial contribution was made to families who lost one or more of their members. A total of 156 mln Albanian lek had been provided by the government to the affected families as of 28

²³⁰⁴

UNDAC MISSION REPORT Gerdec Explosions, Albania, 15 March 2008.

March 2008.

measures for human life and property and foresee activities to overcome civil emergencies through available capacities and provision of assistance from outside, if necessary.²³⁰⁵

4.3 Logistics support in crises

The logistic support is noted in the NCEP as essential to the successful disaster response operation²³⁰⁶. One of the four Civil Emergency Management Team sections on national and local level is the Logistic Section (the others are Information, Planning and Operations).²³⁰⁷ Under “logistic” the Albanian Government considers mainly “mobility”; the condition (if necessary – the repair) of the road system and the availability of vehicles and fuel. Such logistic capabilities assessment should be done periodically on regional and national level.²³⁰⁸ As noted in Section 5 Capabilities in this document (p.50), the specialized engineer vehicles and the condition (usability) of the road system is a serious issue for the Albanian government. The reason is the already mentioned poor condition of the road system and its vulnerability to natural disasters.

Other elements, related to logistics are stockpiles (food, cloths, tents etc.) and healthcare. The stockpiles are provided by governmental reserves, private companies (the authorities have to assess periodically the available quantities) and international assistance. The healthcare is provided by the standing facilities and the “crisis” assets of the Armed Forces and the Red Cross.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

In Albania three separate organisations provide national weather forecasting: the Institute of Environment, Water and Energy (IEWE), the Military Meteorological Service (MMS) under Albanian Ministry of Defence and the Meteorological Service under National Air Traffic Agency (MSNATA). Besides them, there is also one private company performing weather forecast.²³⁰⁹

Institute of Energy, Water and Environment (IEWE) produces general forecast for 24 hours, 3 and 5 days and 10 days outlooks. IEWE’s operational forecasting is based on use of printed analysis and forecast products from international forecasting centers and from the Montenegrin NMHS. The IEWE forecasters do not have access to any real-time data. IEWE has 2 duty forecasters and it does not have capacity to operate 24/7 weather forecasting services.

In addition, the IEWE does not produce special marine forecasts. Further, there is no capacity to download numerical weather prediction model products to be used for national weather forecasts, or to run any numerical weather prediction models. MMS maintains cooperation with the Italian

²³⁰⁵ Ibid., pp. 26-27.

²³⁰⁶ Ibid., p.60 and p. 75.

²³⁰⁷ Ibid., p.13.

²³⁰⁸ Ibid., p. 30.

²³⁰⁹ Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs, Chapter 2, p. 14.

meteorological service for the use for weather forecasting. On the other hand, the IEWE produces special forecasts for the agriculture and aviation sectors.

However, the IEWE does not produce any public warnings. It has a governmental role to produce updated maps and forecasts to the authorities. Hydrological studies for flood warnings have been developed for different basins, while flood forecasting is prepared for different river basins using meteorological forecasts and by monitoring water levels. MMS gives occasionally warnings in connection to its daily TV weather forecasts. Warnings to the aviation sector only are produced by the MSNATA.

Moreover, IEWE disseminates hazard monitoring data, forecasts and early warning to the Head of the National Committee for Disaster Reduction and other partners. The limited weather warnings produced are disseminated to the public via media. The MMS provides warnings through TV presentations and by disseminating advice to the media, in order to edit their own weather forecasts and warnings. Currently there are no specific procedures for interrupting TV or radio programs, or to have a continuous warning stripe on the TV screen in the case of emergency. Method to send warnings directly via SMSs to mobile phones located at site of danger is not in use in Albania. Sectors like Ministry of Health or NGOs like the Albanian Red Cross are not on the direct contact list of warnings of hydrological or meteorological hazards. Further, Albania is not member of the EUMETNET METEOALARM systems.²³¹⁰

International cooperation is key part for the successful operation of event forecast and warning. Weather forecasts and forecasting of natural hazards are based on products from global and regional scale state-of-the art numerical weather prediction models, use of satellite data and sharing of data from conventional and modern remote sensing systems.²³¹¹

²³¹⁰ Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs, Chapter 2, pp. 21-22.

²³¹¹ Ibid., p. 24.

5 Capabilities

5.1 Human resources

Earlier data show that in normal times the human resources dedicated to crisis management include the following: app. 450 personnel, including the employed in civil protection at prefekturë level (app. 50) and personnel employed in civil protection at commune or district level (app. 400).²³¹²

There are thirteen people, comprising the General Director and the managers of the directorates, compose Albanian Civil Protection at central level in the General Directorate of Civil Emergency. Each prefekturë dispose of some permanent staff, incl. a set of technicians and a Civil Emergency Officer. Each municipality and commune has a designated officer with responsibility for civil emergency matters.

In times of crisis, the human resources engaged also comprises the fire brigade (app. 480), private companies contracted by the authorities (app. 400) plus forest service personnel (app. 100).

Albanian Red Cross is the main non-governmental stakeholder with 80 000 members, 2 000 volunteers and 39 branches. Founded in the 1920s, its current activities are based on Law No. 7864 on the Albanian Red Cross. According to the National Plan for Civil Emergencies the Albanian Red Cross has an important role in disaster prevention, preparedness, response and recovery. The Albanian Red Cross has developed its own disaster plans and its structure for responding to disasters is organised in two levels: central, which manages the main human and material resources; and local/district, where 39 disaster-trained volunteer teams comprising between 25 and 30 people have been established throughout Albania. In 2002 a partnership agreement was signed between the Ministry of Interior, the Albanian Red Cross and UNDP Albania.²³¹³

5.2 Materiel (non-financial) resources

According to the National Civil Emergency Plan (NCEP), the key civil emergency response capacities in Albania include:

Albanian Special Forces Teams:

- Civil Protection Base, MoD, Tirana – Earthquake Search and rescue (SAR) 2 teams; Flood SAR 2 teams; Firefighting/SAR 2 teams; Chemical Pollution/SAR 2 teams; Mountain SAR 2 teams; Road clearance from snow and landslide 3 teams;
- Air Force Search and Rescue Service, MoD - National airborne SAR Service: 56 persons and 6 Helicopters;
- Special Commando Battalion, MoD, Tirana - Air and Marine accident SAR team 1 team;
- NBC Battalion, MoD - Chemical, bacteriological, ecological hazard rescue team 1 team 25 specialists;

²³¹² The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe.

²³¹³ IPA Beneficiary Needs Assessment Albania, p. 11.

- National Military Hospital, Tirana - Emergency Surgical Teams (each of Surgeon, traumatologist, anaesthetist, 3 support staff) 2 teams;

Specialist Technical Services

- Ministry of Industry and Energy - Mines Inspectorate, mines SAR team 52 Specialists; Environmental Protection and Rehabilitation 55 Specialists; Electrical Sector Emergency Response 60 Specialists (KESH);

Transport Capacities and Specialist Equipment

- Ministry of Tourism and Territory Regulation - Tankers 5 water tankers, 5 sewage tankers, Welding/cutting equipment 5 units, Bulldozer 1 unit, Transport Capacity (people) 16 vehicles (total 469 people);
- Transport Capacity (Freight) 29 Trucks (total 166 mt), Tipper Trucks 8 units (total of 100 mt),
- Earthmoving Equipment/Bulldozers 11 units (total of 450 m3), Snow Clearing Equipment 3 Units, Motor Boats 8 units (total of 80 persons), 14 units for freight, Fire Trucks 2 Units at 5 mt each, Civil.
- Protection Base, MoD - Generators 8 units (total 396 kw);
- Military Engineers Brigade, MoD - Specialists: 50 Specialists, Tipper trucks 5 units, Earthmoving Equipment/Bulldozers 10 units excavators, 5 units, tracked bulldozers; Crane 1 unit at 15 mt; Medium capacity vehicles 8 units.
- NBC Battalion, MoD - Decontamination 6 vehicle units and 25 specialists;
- State Reserves - Transport 20 light vehicles of 9 mt
- Albanian Red Cross - Transport 4 heavy trucks, light vehicles in 12 branches in 12 prefekturës.

Assistance Services

- Civil Protection Base, MoD - Operational Forces 170 persons, Field Hospital I unit 50 beds, 4 treatment rooms, Potable Water 7 Tankers (total 67 mt) and 11, pumps (total 12 m3/hour), Water Purification 2 units (total 6,000 l/hour), Bakery units 2 units (total 2,400 kg/day), Mobile kitchens 12 units (total 3,000 rations/day), and 1 kitchen truck 300, rations/day, Shelter Tents for 17,000 people, Shower Trucks 2 units (total 200 persons/day),
- State Reserves - Temporary shelter 28,000 m2 for 6,000 people in warehouses, Tents for 30,000 people, Warehouse storage Total of 43,000 m2 for goods, Fuel storage for 14 mt
- Albanian Red Cross - Food Rations 8,000 people for 1 month, Shelter and Non-Food Items 8,000 people, Family links Tracing service linked to ICRC international tracing system.²³¹⁴

However, in the case of a wildfire, service personnel attend the scene but are active during the operational phase only as observers or technical advisors. At present, the Service has no vehicles suitably equipped to cope with wildfire. The present fire-fighting capacity of local and national forces in Albania is not sufficient to tackle large wildfires, especially in the presence of multiple simultaneous events. The only way of tackling such emergencies is to address a request for assistance to the Moni-

²³¹⁴ National Information on Disaster Risk Reduction: Albania, Annex: Reference Guide for Preparation of National Information, pp. 11-12.

toring and Information Centre (MIC, now Emergency Response Coordination Centre (ERCC) or to the Euro-Atlantic Disaster Response Coordination Centre (EADRCC) of NATO.²³¹⁵

The general conclusion of most of the UN reports about Albania are very similar, stating that the Government has limited capabilities and the DRR system is relatively poor organized.

A series of reports within SEEDRMAP provide important recommendations with respect to the crisis management system in Albania. For example, a report on “The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe”²³¹⁶ concludes (p.152) that „the capacity of Albania to respond to major events is burdened with procedural operations which could be detrimental to effective emergency responses.” Further on, the report expressed doubts as to the effectiveness of the chain of command, and notes that significant capacity gaps exist in terms of quantity and quality of resources.

In 2012, the World Meteorological Organization published a report on “Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs.”²³¹⁷ The report assesses (p.9) that the

Albanian hydro-meteorological sector is more or less disordered and does not have the technical, human and financial resources to meet the needs for hydro-meteorological services in order to provide expected information and products to the Government, the socio-economic communities, to protection of human life, and to improve human and environmental safety. It neither has the capability to properly fill the international commitments of producing hydro-meteorological data to promote regional and global cooperation in production of better hydro-meteorological modelling and services to promote the human safety and well-being.

The conclusions of the UNDAC report Assessment and recommendations following the Gerdec Explosions Albania (20 March – 3 April 2008)²³¹⁸ are similar:

The institutional structure for disaster management needs strengthening at the national, regional and municipal levels. National disaster funds are very small compared to the potential economic and fiscal damages that may be caused by large disaster events in Albania. ...

Since previous initiatives and recommendations have not been operationalised, an implementing body must be identified, established and made sustainable at the highest possible level to deal with the issue.

Due to the fact that Albania has “inadequate”²³¹⁹ disaster response capabilities, the government very often has to rely on such provided by its allies. Even before the membership in NATO (2008), the

²³¹⁵ The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe, *South Eastern Europe Disaster Risk Mitigation and Adaptation Programme*, p. 54.

²³¹⁶ The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe, available at http://www.unisdr.org/files/9346_Europe.pdf.

²³¹⁷ Available at <http://www.wmo.int/pages/prog/drr/projects/SEE/documents/SEEPPhase%20I%20-%20Final%20Report.pdf>.

²³¹⁸ Available at [http://www.unep.org/french/greenstar//publications/Report%20Ammunition%20Blast,%20Albania,%202008\[2\].pdf](http://www.unep.org/french/greenstar//publications/Report%20Ammunition%20Blast,%20Albania,%202008[2].pdf).

²³¹⁹ Duro F., Albania’s civil protection system and its related regional cooperation, IDM, 2014, p. 9.

Alliance was a very important element of the Albania DRR system. Since 2002,²³²⁰ the NATO assistance has been requested by Albania 7 times (more than assistance requests by any other country): 2002 –Floods, 2007 – Forest fires, 2008 – Massive explosion in ammunition storage site, 2010 – in January and in December – Floods, 2012 – Snow storms, 2015 – Snowfall and Floods. Albania has needed most of all First Aid materials – food, medicaments and other supplies (tents, sleeping bags, cloths, boots etc.) and Equipment/Machinery. For example, during the floods in 2002 Albanian Government requested such vehicles as bulldozers, boats, cranes, fire trucks etc. In general the NATO allies (and some other countries) are providing first aid supplies and materials, but limited quantity of heavy machinery. In several cases SAR, MedEvac and Fire Fighting aircrafts and helicopters were provided, together with specialist teams – medical staff, SAR teams, Firefighters. Usually most of the countries are providing materials and some of them – financing – USD 20-50 thousand. There are some exceptions, however. During the 2002 floods Italy provided between 1.5 and 2 mln. EUR for emergency rehabilitation of the electric network.

The best example to understand how much dependant of foreign aid is Albania is the 2015 flood. The initial request was for almost EUR 63.5 mln. . Slightly over 912 thousand Euro of them were for First Aid – food, sleeping bags, tents, pumps, coats etc. The rest of over EUR 62 mln. was for Equipment/Vehicles, including EUR 30 mln. for the reconstruction of 300 km of roads. NATO countries provided almost all of the requested first aid and some equipment. Additional over USD 1.5 mln. were donated by the UAE, the USA, the Dutch Red Cross and the European Commission, some smaller transfers not included.

5.3 Training

According to the Law on Civil Emergencies the Ministry of Interior is tasked to elaborate educational and training programmes in the area of protection against natural and other disasters. In fulfilling these requirements the Ministry of Interior has designed and implemented the National Civil Emergency Training Curriculum, comprised of eight training manuals containing national and international civil emergency standards and guidelines, undertaken training activities and organised conferences at the national and regional level. Institutions responsible for designing and conducting training and simulation activities on specific issues relevant to civil emergency management, are obliged to inform and coordinate their activities with the Civil Emergency System Service.

The Directorate for Civil Emergencies has established a national training centre, the Albanian Red Cross actively cooperates through its four training centres for volunteers and the General Directorate of Civil Emergencies regularly conducts training courses for fire brigades at the Fire Brigade Training Centre in Tirana. Through the Training of Trainers initiative, Albania has established a core group of civil emergency trainers. They have increased the capacities related to the design and organisation of training activities for different target groups at both national and local level.²³²¹

Tabletop Exercises, Functional Exercises, and Full-scale Exercises are carried out.

Albania's Department of Seismology of the Geo-sciences Institute is participating in the project *Harmonization of seismic hazard maps for the Western Balkan Countries* launched in 2007 in the framework of the Disaster Preparedness and Prevention Initiative of the Stability Pact for South Eastern

²³²⁰ The data available on http://www.nato.int/cps/en/natohq/topics_117901.htm?selectedLocale=en is for requests after 2002.

²³²¹ IPA Beneficiary Needs Assessment Albania, p. 16.

Europe with the support of the NATO Science for Peace and Security Programme. The main aim of the project is to prepare the ground for joint preparedness and prevention activities in disaster management among the countries of the region. The process of harmonization of the earthquake terminology and of the seismic risk maps targets improvement of scientific collaboration between the project partners and enhancing the cooperation and coordination in the field of seismic hazard management.

Moreover, bilateral activities have been organised between relevant Albanian institutions and counterparts in neighbouring countries. Albania has established bilateral cooperation with the Italian Government, particularly in respect to disaster risk reduction training activities. Additional memorandum of understanding was agreed with Greece, FYROM, Turkey, Croatia and Austria, especially regarding support in case of large scale disaster response operations.²³²²

Albania has participated in several regional and local exercises with structures of line ministries, local power structures, foreign agencies and volunteers. These include table top exercises, such as main planning conference, (CMEP), Tirana, 2006; Table top exercise, (CMEP), Durrës, 2006; and Intergovernmental table top exercise, (with support US Army), Tirana, 2009.²³²³

5.4 Procurement

5.4.1 Procurement regulation

Public procurement in Albania is governed by Law No. 9643 dated 20 November 2006 as amended (PPL). The PPL defines the Public Procurement Agency (PPA) as the central body responsible for public procurement. The PPA operates as a regulatory authority and manages the national procurement system.

The PPL applies to all contracts for supplies, services or works awarded by contracting authorities, unless explicitly exempted.

Art. 5 of the PPL deals specifically with defence procurement, stating that the PPL “shall apply to all public contracts awarded in the field of defense, subject to para 2 of this Article.” The PPL shall not apply in the cases of “(a) when CA (Contracting Authority) shall be obliged to supply information whose disclosure is contrary to the essential interests of national security; (b) for the purchase of arms, munitions and war material, or related services. This exception shall not adversely affect the conditions of competition regarding products not specifically intended for military purposes; (c) in specific circumstances caused by natural disasters, armed conflicts, war operations, military training and participation in military missions outside the country.”²³²⁴

5.4.2 Procurement procedures

The PPL provides for two levels of thresholds: low and high. Furthermore, the PPL provides that the level of each threshold will be adjusted on a two-year basis. The high thresholds are approximately EUR 8 mln for works and EUR 1.3 mln for goods and services. The low-value thresholds are app. EUR 80,000 for works and EUR 50,000 for goods and services.

²³²² IPA Beneficiary Needs Assessment Albania, pp. 19-20.

²³²³ Vademecum Civil Protection – Country Profile – Albania.

²³²⁴ Public Procurement Law, available at <https://www.app.gov.al/ep/Legislation.aspx>.

For contracts above the low value thresholds, contracting authorities shall use open procedures, restricted procedures, design contests. Negotiated procedures may be used only in the specific circumstances set forth in Art. 32 and 33 of the PPL.

For contracts of a value lower than the low value thresholds, contracting authorities may use negotiated procedures with or without prior publication and requests for proposals in accordance with the conditions provided in the law.

The contracts are advertised on the website of the PPA and are fully accessible to any bidder, wherever it is located, and the time limits are a minimum of 30 days from publication on the website (for open procedures).

5.5 Niche capabilities

Albania is a relatively small country with limited capabilities. It is hard to find any specialization (niche) in its DRR capabilities. But if we analyse its defence capabilities as a whole, we can assume that the DRR is one of the area of specialization of Albanian Armed forces, together with the asymmetric warfare.²³²⁵

²³²⁵ For an overall assessment of AAF capabilities –see the annual edition of Military Balance, published by Routledge, <https://www.routledge.com/series/MB>.

Resources

Legislative acts

Law No. 7623, dated October 13, 1992 on “Forests and Forestry Police Services.”

Law No. 7664, dated January 21, 1993 on the “Protection of Environment.”

Law No. 7761, dated October 19, 1993 on “Prevention and Fighting of Contagious Diseases.”

Law No. 7864, dated September 29, 1994 on the “Albanian Red Cross.”

Law No. 7978, dated July 26, 1995 on Armed Forces of the Republic of Albania, amended.

Law No. 8093, dated March 21, 1996, on “Water Reserves.”

Law No. 8408, dated September 25, 1998 on the “Construction Police.”

Law No. 8553, dated November 25, 1999 on the “State Police.”

Law No.8671, dated October 26, 2000, on “Powers and Authorities of the Armed Forces of the Republic of Albania.”

Law No. 8681, dated November 2, 2000 on “Designing, Construction, Exploitation and Maintenance of Dams and Dikes.”

Law No. 8736, dated February 12, 2001 on “Security of Pressure Equipment in Operation.”

Law No. 8756, dated March 26, 2001 on the “Civil Emergency Services.”

Law No. 8766, dated April 5, 2001, on “Fire Protection and Rescue.”

Law No. 8897 dated May 16, 2002 on “Protection of air from pollution.”

Law No. 8934, dated September 5, 2002 on the “Protection of Environment.”

Law No. 9106, dated July 17, 2003 on “On Hospital Service in the Republic of Albania.”

Law No. 9126, dated July 29, 2003 on the “Civil Use of Explosive Substances.”

Law No. 9251, dated July 8, 2004 “Code of Seas of Republic of Albania.”

Other normative acts

Decision No. 664, dated December 18, 2002 on the “Criteria and procedures dealing with proclamation of a state of civil emergency.”

Decision No. 654, dated December 18, 2002, on “Temporary application of taxes for private business vehicles by the government bodies in a situation of civil emergency.”

Decision No. 655, dated December 18, 2002, on “Establishment and functioning of the national system structure on civil emergency planning and response.”

Decision No.663, dated December 18, 2002 on the “Constitution, Functioning and Responsibilities of the Technical-Advisory Commission of Emergency Specialists.”

Decision No.664, dated December 18, 2002 on “Criteria and procedures of proclamation of the civil emergency situation.”

Decision No. 531, dated August 1, 2003, on the “Organization, Functioning, Duties and Responsibilities of Civil Emergency Service.”

Decision No. 532, dated August 1, 2003 on the “Responsibilities and Duties of the Department of Planning for and Overcoming Civil Emergencies.”

Decision No.533, dated August 1, 2003 on the “Involvement of Citizens in Prevention and Overcoming Civil Emergencies.”

Decree of the Council of Ministers No. 103 dated March 31, 2002 on “Monitoring of environment in Republic of Albania.”

Regulation of Operative Management of Emergencies for the State Police, No. 1604, dated 22 December 2001.

Official documents (white papers, strategies, etc.)

National Civil Emergency Plan, 2004.

National Strategy for Disaster Risk Reduction and Civil Protection 2014-2018, draft as of June 2014.

Online resources (e.g. websites of key CM organizations)

Albanian Civil Protection, <http://www.mbrojtjacivile.al>

Ministry of Finance, <http://www.financa.gov.al/>

Ministry of Interior, <http://www.punetebrendshme.gov.al/>

Prime Minister’s Office, <http://www.kryeministria.al/en/>

DPPI SEE Disaster Preparedness and Prevention Initiative for South Eastern Europe, <http://www.dppei.info/>

Defense Video & Imagery Distribution System, <https://www.dvidshub.net/news/175774/joint-reaction-2015>

AL-DRMAP Project, <http://www.worldbank.org/projects/P110845/disaster-risk-mitigation-adaptation-project?lang=en>

GFDRR initiative, <https://www.gfdr.org/area/Pillar3>

CIMA foundation – DEWETRA an DesInventar Systems, <http://www.cimafoundation.org/en/cimafoundation/dewetra/>

<http://www.cimafoundation.org/en/cima-foundation/desinventar/>

IPA (Instrument of Pre-accession Assistance) Adriatic Cross-border Programme – ADRIARadNet and HAZADR Projects, http://www.adriaticpacbc.org/index.asp?page=interna&level=project_list

IncREO Project, <http://www.increo-fp7.eu/project-overview/>

Euro-Atlantic Disaster Response Coordination Centre (EADRCC) – Operations, NATO, www.nato.int/cps/en/natohq/topics_117901.htm.

Publications

Study Reports

Albanian HFA Monitoring Report 2011-2013.

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ISDR, WMO, WB, Strengthening the Hydrometeorological Services in South Eastern Europe: South Eastern Europe Disaster Risk Mitigation and Adaptation Programme, 2008. Available at http://www.unisdr.org/files/18136_seedrmapevaluation.pdf.

Marchio R., "Operation Alba": A European approach to Peace Support operations in the Balkans, USAWC, 2000.

The Military Balance. Routledge, annual editions. <https://www.routledge.com/series/MB>.

UNDAC, Assessment and recommendations following the Gerdec Explosions, 2008, available at <http://www.unep.org/french/greenstar//publications/Report%20Ammunition%20Blast,%20Albania,%202008%5B2%5D.pdf>.

UNDP, Disaster Risk Reduction Capacity Assessment Report for Albania, 2011. Available at <http://www.gripweb.org/gripweb/sites/default/files/Albania%20DRR%20Cap%20Ass%20Report%20Hachim%20Final.pdf>.

UNISDR, Global Assessment Report on Disaster Risk Reduction, 2013. Available at <http://www.unisdr.org/we/inform/publications/33013>.

UNISDR, Global Assessment Report on Disaster Risk Reduction, 2015. Available at http://www.preventionweb.net/english/hyogo/gar/2015/en/gar-pdf/GAR2015_EN.pdf.



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ISRAEL

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

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Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

The Israeli approach to emergency management is based primarily on the need to prepare for and respond to attacks against the nation. The strongest danger facing Israel is war related, and thus out of DRIVER's scope, while the respective development of the emergency management system also strongly affects the management of other types of crisis ("single-hazard based approach" – counting on overlaps and spinoffs from preparation for one type of hazard that can also be applied to managing other types of hazards). The Israeli emergency management system has also been called a "military-centric" model (Rozdilsky 2009).

Among natural disasters, earthquakes are the major field of concern, and organisations put strong efforts in respective risk assessments, and approaches to prepare for and cope with consequences of earthquakes. In addition, also wildfires and storms have caused major disasters.

Main involved organisations in emergency management are the following: In the event of a non-war emergency, the *Israel Police* are the first responders and have operational responsibility over all the rescue services such as *Magen David Adom (MDA)* and the *Fire Service*. In these cases, the Police is in charge (incident commander), and the *National Emergency Authority (NEMA)*, established in 2007 as part of the *Ministry of Defense*, is taking care of the inter agency coordination.

The *Ministry of Public Security* is responsible for the operational preparation and the readiness for emergencies and crisis, of all the authorities subjected to it: the Israel Police, the Israel Prison Service and the Fire and Rescue services.

In case of a large scale event, the incident management can be handed over from the Police to the *Home Front Command (HFC)*, a section of the *Israel Defense Forces (IDF)*, by a governmental decree (which has never happened to date). In other events, HFC is involved with tasks such as Search & Rescue (Ministry of Public Security 2014; expert interview).

Regarding international assistance to Israel, main involved institutions are the *Ministry of Foreign Affairs*, the *Primary Office*, and NEMA. NEMA provides recommendations to the Primary Office, and the Ministry of Foreign Affairs sends out requests for international support.

Volunteers in emergency management are active at the Israel Police, the Fire and Rescue Services, and MDA.

Table of Contents

ISRAEL Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1702
Overview	1703
Table of Contents	1704
List of Figures	1706
List of Abbreviations.....	1706
1 Policy	1707
1.1 Risk Assessment	1708
1.2 Policy and Governance	1708
1.2.1 Strategy scope and focus	1708
1.2.2 Monitoring and analytical support to policy making; R&D	1709
1.2.3 Policy for Prevention	1709
1.2.4 Policy for Preparedness	1709
1.2.5 Policy for Response	1709
1.2.6 Policy for Relief and Recovery	1710
1.3 Financing.....	1710
1.4 Policy review, Evaluation & Organisational Learning	1710
1.4.1 Post-Disaster Assessment	1710
1.4.2 Departmental Lessons Learned systems	1710
1.4.3 Centralised (national) Lessons Learned system	1710
1.4.4 International exchange for Lessons Learned	1710
1.4.5 Regular policy reviews	1711
1.5 Resilience	1711
1.6 Information sharing and data protection	1711
2 Legislation	1714
2.1 Crisis (emergency, disaster) management concept.....	1714
2.2 General crisis (emergency, disaster) management law.....	1714
2.3 Emergency rule	1715
3 Organisation.....	1718
3.1 Organisational chart.....	1718
3.2 Organisational cooperation	1725
4 Procedures	1726

4.1	Standing Operating Procedures (SOPs) and Guidelines.....	1726
4.2	Operations planning	1726
4.3	Logistics support in crises	1726
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1726
5	Capabilities.....	1728
5.1	Human resources	1728
5.2	Materiel (non-financial) resources	1729
5.3	Training	1729
5.4	Procurement	1730
5.5	Niche capabilities	1731
	Resources	1732
	Legislative acts	1732
	Other normative acts	1732
	Official documents (white papers, strategies, etc.)	1732
	Online resources (e.g. websites of key CM organizations)	1732
	Publications	1733
	Expert interviews	1734

List of Figures

<i>Figure 1: Districts of Israel (Source: Wikipedia 2014)</i>	1707
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List of Abbreviations

CBS	Central Bureau of Statistics
CTSC	Commanders' Training Simulative Center
HFC	Home Front Command
IDF	Israel Defense Forces
MDA	Magen David Adom in Israel
NEMA	National Emergency Management Authority

1 Policy

Israel operates under a parliamentary democracy.

The legislative branch is the Knesset, which is the parliament of the State of Israel. It has parliamentary sovereignty, and enacts legislation on every issue.

The executive branch includes the government and government ministries.

The judiciary includes the system of courts: the Supreme Court, the District Court, Magistrates Court, Court for Local Affairs, Religious Court, Traffic Court, Labour Court, Juvenile Court, etc.

The President is elected by the Knesset every seven years, and his main duties are representational.

The incumbent President is Reuven Rivlin.

The incumbent Prime Minister is Binyamin Netanyahu.

Local authorities are the municipalities, local councils, and regional councils. These authorities have governmental and administrative powers in their areas of jurisdiction, and are responsible for provision of services to their constituencies .

There are six main administrative districts of Israel (see figure 1): Center, Haifa, Jerusalem, North, Southern, and Tel Aviv Districts. The Judea and Samaria Area, as well as parts of the Jerusalem and North districts are not recognized internationally as part of Israel (Wikipedia 2014).



Figure 65: Districts of Israel (Source: Wikipedia 2014)

1.1 Risk Assessment

The primary danger facing Israel is war related, and thus out of DRIVER's scope – the danger from missile or rocket attack (HFC 2014b).

Following disaster statistics of EM-DAT, the following events belong to the most severe natural disasters in Israel: Storm in December 2013 (> 2 Mio. people affected), wildfire in December 2010 (> 20.000 people affected, assistance through EU Civil Protection Mechanism was provided), and flood in December 1998 (1.000 people affected) (EM-DAT 2014; EC 2013).

Even though earthquakes do not appear in these statistics, they are a major concern, they are the threat considered most likely among natural hazards.

The national assessment of risk is an ongoing process and conducted as follows:

The National Emergency Management Authority (NEMA, see chapter 3.1) *is responsible for preparing a national risk profile of security issues that might occur during peace or war times – both conventional and CBRN events. The results of the risk assessment are distributed to all government ministries, which are then required to prepare a sectoral risk assessment report aligned with the overall national programme, covering areas that are under their responsibility. The preparation of the national risk profile is performed by system analysis professionals, based on protocols and procedures developed to ensure in-depth collection and management of relevant information from numerous sources. The profile is reviewed periodically and updated as needed, in accordance with changes in the region (WHO 2012).*

The National Inter-Ministerial Committee for Earthquake Preparedness *was given responsibility for preparing a national risk profile of natural disasters focusing on earthquakes, which are considered to be the most likely threat (among natural causes) to Israel. In order to do so, information from various sources was collected and analysed and the national risk defined, including references to forecasted casualties, damage to infrastructure, implications for the population, and so on. The risk assessment was formally adopted by the government and disseminated to all ministries to serve as the basis for developing a response. Discussions are currently taking place regarding the appropriateness of the risk profile: various experts have expressed their view that with the advancement of risk assessment methodologies, as well as lessons learned from earthquakes in different parts of the world and in the region, it may be that the present profile is too severe. As a result, the national risk profile for earthquakes is undergoing a process of re-evaluation (ibid).*

Overall coordination of risk assessments, national risk profiles and emergency preparedness planning is conducted by NEMA, which also prepares annual reports on the activities implemented by all agencies as part of emergency management programmes (ibid.).

1.2 Policy and Governance

1.2.1 Strategy scope and focus

The strategic approach to crisis management seems to cover all necessary activities for prevention (incl. resilience actions), preparedness, response (incl. mitigation), and recovery.

NEMA's responsibilities, for example, "cover all components of emergency management, including disaster risk reduction, prevention, mitigation, response, reconstruction and rehabilitation activities" (see chapter 3.1). Further verification of the strategy scope and focus was not possible in the framework of this study.

1.2.2 Monitoring and analytical support to policy making; R&D

A comprehensive overview was not possible in the framework of this study. Main research institutions with regard to the main hazard earthquakes are the Geological Institute of Israel, the Geophysical Institute of Israel, and the National Building Research Institute of the Technion (Laor 2005). Further, the Institute for National Security Studies can be named.

The Ministry of Public Security "conducts research in the field of public security through the Ministry's Bureau of the Chief Scientist and the newly established Research unit of Strategy and Policy Planning Department.

The Bureau of the Chief Scientist is a professional scientific agency within the Ministry of Public Security, whose principal responsibility is to develop, formulate and promulgate science-driven law enforcement policy as it relates to public security and combating crime in the State of Israel.

The Ministry works in conjunction with the research division in the Israel Police and the Israel Prison Service" (Ministry of Public Security 2014e).

R&D activities at the Home Front Command comprise a) crisis management, situation awareness and disaster resilience, b) critical infrastructure protection, and c) communication technologies and interoperability (HFC 2014d).

Also MDA is involved in respective research activities.

1.2.3 Policy for Prevention

Aim of this and the following sub chapters was to describe lead responsibilities and further contributing organisations differenced by the different parts of the crisis management cycle. Anyways, specific policies in Israel distinguished by prevention, preparedness, response, relief and recovery have not been identified. However. the overall organisation, lead responsibilities etc. in emergency management in Israel is described in chapter 3.1 and 3.2.

1.2.4 Policy for Preparedness

See chapter 1.2.3.

1.2.5 Policy for Response

See chapter 1.2.3.

1.2.6 Policy for Relief and Recovery

See chapter 1.2.3.

1.3 Financing

Concrete figures can not be named, as too many issues and types of budgets from several organisations would need to be included (expert interview).

However, “emergency preparedness in Israel is a national priority: extensive efforts and resources are continuously invested to ensure readiness for all anticipated potential hazards” (WHO 2012).

MDA as an example spends max. 0.5 million € on training and preparedness (expert interview).

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

See chapters 1.4.2 – 1.4.5.

1.4.2 Departmental Lessons Learned systems

While it could not be verified for each single organisation (see chapter 3.1), in general the involved organisations have their own internal lessons learned system (expert interview).

1.4.3 Centralised (national) Lessons Learned system

For missions under Police control (no war-like or large scale events), the Police conducts an evaluation in the aftermath of the event. Results are shared with all organisations involved in the mission (expert interview).

For the overall picture, NEMA collects all available lessons learned reports, compiles and evaluates them (expert interview).

1.4.4 International exchange for Lessons Learned

Israel participates in international trainings and exercises, while no specific information on international exchange for Lessons Learned could be obtained in the framework of this study.

1.4.5 Regular policy reviews

The WHO report on “Assessment of health-system crisis preparedness – Israel” states in the context of health crisis preparedness that “National management policies are closely and frequently reviewed to ensure their appropriateness and their modification is disseminated to all concerned parties” (WHO 2012).

1.5 Resilience

Israel implements the concept of resilience, there is an overall written strategy (only in Hebrew), which has influence on several sectors, including e.g. education. In further documents, needs or gaps with regard to resilience are mapped for different levels, and respective answers are mapped to these gaps. Specific guidelines for the public on how to behave in hazardous situations, are supposed to enhance public awareness and thus overall resilience (expert interview).

No specific standards being used could be identified, but there are efforts to standardize processes, and to implement international standards (ISO) (expert interview).

A method for assessing community resilience has been developed in Israel – a result of the accumulation of over 30 years’ experience of society’s exposure to emergencies and threat. This method, the Conjoint Community Resiliency Assessment Measure (see Leykin et al. 2013), is being adopted by various government ministries as well as the Home Front Command (HFC) in order to assess, monitor, and evaluate the resilience of the population and its systems for coping with disasters. It enables the identification of weak points – such as leadership, knowledge, social cohesion or security – in order to direct intervention to strengthening these areas (WHO 2012).

1.6 Information sharing and data protection

Specific policies, measures or derogations from EU law with regard to data protection, adapted by Israel, could not be identified. The same accounts for overall registers/databases of volunteers.

Regarding social media, it can be stated that in general, the use of social media seems to play a minor role. It is mostly not actively used by emergency managers – but activities and published information or statements are monitored (expert interview).

Most emergency services instruct the public not to turn to social media to report emergencies or request assistance, but the emergency agencies are nevertheless asked to monitor all their digital platforms for signs of distress and respond when necessary, as well as update them with accurate information in a timely matter.

In terms of reaching the public using social media, it should be considered that part of the Israeli population does not speak Hebrew. Further, Israel has a large Jewish ultra-Orthodox community that does not have much exposure to new media (Ministry of Public Security 2014h).

However, the Israel Police runs a Facebook page, which has been proved useful also in crisis situations, as described on the website of the Ministry of Public Security:

Yamincha, who runs the internet and new media desk at the Israel Police with a staff of 15, manages the Israel Police Facebook page. With over 100,000 followers and climbing, an active

Twitter account with over 1,500 followers, a YouTube account and a new and improved website, the Israel Police's presence on the internet and social media sites is a powerful tool for fighting crime and serving the public. [...]

Beyond fighting crime, the Facebook page is a valuable tool in reaching the public and providing it with up-to-date, sometimes vital information. In December 2010, Israel experienced one of its deadliest fires ever, when the Mt. Carmel forest fire tore through Northern Israel for four days. Forty-four people were killed, 25 square kilometers of forest land was burned, and 100 homes were destroyed. "First, people started posting pictures of smoke from outside their windows," Yamincha says of the beginning of the fire. Once pictures were posted and the word got out, residents near the fire and concerned family members began inundating the emergency hotlines. Once the phones crashed, everyone turned to Facebook. "We realized it was going to be a long night," says Yamincha.

For the next four days, the Facebook page fielded, on average, a question every two minutes. "We replaced the hospitals, the army and the home front command. People couldn't get in touch with them so they contacted us; and we answered each of their questions. And if we didn't know the answer, we had contacts who could find out for us," says Yamincha.

Instead of having to disseminate information through typical media sources, the Israel Police had access to the public directly through their Facebook page, where they posted official guidelines and information. Additionally, as part of the spokesperson's office, the staff running the Facebook page had information streaming in from all other spokespeople, and was the most up-to-date source. As Yamincha puts it, "The media would update themselves based on our posts and answers" (Ministry of Public Security 2014f).

Also during a heavy snow storm in 2013, in which many cities lost power and had inaccessible roads, many citizens and even municipal representatives used social media to report power outages and blocked roads to the relevant emergency authorities (Ministry of Public Security 2014h).

Besides these "success stories", the Israel Police also states challenges of Facebook:

According to Yamincha, managing an official police Facebook page is a challenge, which requires constant attention. He says the most important thing is to have adequate staff. "You need people; and they have to be experts – experts at writing content, and experts at new media. You have to know how to write, what to write, when, and how often."

Additionally, there is the challenge of allowing users freedom to post whatever they want. Yamincha says the police's Facebook wall is open to the public and uncensored. However, it does uphold Facebook's terms of use, which forbid hateful, pornographic, unlawful or discriminatory content; and Yamincha blocks users who leave posts that violate those terms. So far, Yamincha says he has only had to block 140 users.

Moreover, Yamincha says the constant presence of the police on the internet – working from 6 a.m. to 1 a.m. – creates a false sense that they can respond to anything. "I'm scared that we won't be in time when something happens," he says. "Almost everyday people tell us that they've seen another user post something about wanting to commit suicide, and we try to locate them. We deal a lot with that."

What was once a platform for friends to post pictures and stay in touch is now an entire world, where users exchange information, and can affect real change in the world. The police prevent crimes, save lives, and catch criminals through Facebook, and citizens now have a new place to turn in times of emergency, or when they have a question. While there are risks and dangers to Facebook and other social media applications, the Israel Police has managed to harness the power of Facebook for the good of society, and is always improving (Ministry of Public Security 2014f).

For further information on crisis communication, including a planned development of an “Emergency App”, see chapter 4.4.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

A dedicated crisis management concept, other than the structures and documents described in this report, has not been identified.

2.2 General crisis (emergency, disaster) management law

The WHO “Assessment of health-system crisis preparedness – Israel” compiled essential attributes on the legal framework for national multisectoral emergency management:

Legal framework for multisectoral emergency management

Israel has had to deal with emergency situations since the declaration of its independence in May 1948. As a result, the national laws, decrees, regulations and guidelines provide extensive authority to the different ministries, clearly delineating roles, responsibilities and managerial tools for emergency preparedness and response. Several laws and government policies, as well as binding guidelines and regulations designated to ensure provision of vital services during emergencies, have been legislated and enacted during the 64 years of the country’s existence.

Emergency Regulations

The Emergency Regulations were enacted by the Israeli Parliament in May 1948. The regulations authorize ministers to activate emergency measures that are required to ensure provision of vital services to the state’s population. The regulations are very powerful tools: upon their application they supersede most other laws. Because of their potential strength, since 2010 these regulations have been under review by all ministries, coordinated by the Ministries of Defense and Justice which are designated to maintain the necessary authority to direct emergency management procedures. Nevertheless, efforts are being made to limit the measures that will be integrated in the Emergency Regulations, to avoid as far as possible any violation of human rights.

Civil Defense Law

The Civil Defense Law of 1951 authorizes implementation of all actions pertaining to the well-being of Israel’s population during periods of emergency. The law establishes the civil defence service; mandates the construction and upkeep of shelters in all buildings, both residential and industrial; enables the state’s authority to make use during emergencies of infrastructure, resources or equipment, regardless of their ownership (whether private or public); and provides the Ministry of Defense with the authority and responsibility for directing the overall smooth operation of all vital services, in order to ensure their provision to the population. The law also

defines a civil state of alert and lays down regulations regarding the use of toxic and hazardous materials. [...]

The declaration of a state of emergency can be activated for the whole state or can cover a specific territory (referred to as “special situation of the home front”). The emergency that triggers this declaration can result from various types of threat, such as war or limited military confrontations, major terror attacks, epidemic outbreaks, natural disasters or operational incidents (with the potential of becoming mass disasters).

Modification of the Police Ordinance

The Police Ordinance was modified in 2005 in order to authorize the Minister of Internal Security to declare a state of “mass disaster” for a period of up to 48 hours. Upon its application, police officers are responsible for the control and command of all on-site operations during the event. Accordingly, the police are authorized to direct operations of all first responders, to confiscate any resource needed by rescue agencies (regardless of ownership) and to close areas or prohibit entrance or exit.

Risk reduction – National Master Plan 38

One of the threats faced by Israel is the potential occurrence of a severe earthquake. As part of the risk reduction programme, rigid building codes were implemented in 1975 as a modification of the Planning and Building Law enacted in 1965. Since many buildings were constructed before the modification of the law, National Master Plan 38 was legislated in 2005, encouraging property owners to implement measures designed to strengthen buildings constructed before 1980 and to enhance their survivability during an earthquake. As part of this programme, in order to provide motivation for its implementation, building owners are eligible for additional building rights if they execute the strict regulations. The Plan, which was initially valid for five years, was extended in 2009 for an additional period of five years to 18 May 2015.

See also chapter 2.3 for laws depending on the existence of a state of emergency.

2.3 Emergency rule

Following article 38 of the Basic Law, the Government determines how an emergency is declared and who has the authority to do so. Article 39 deals with the setting up of emergency regulation (Cabili et al. 2014). The state of emergency has been declared shortly after the inception of the state in 1948, and has been renewed annually, thus Israel has lived in a permanent state of emergency until today. Thanks to the state of emergency, the Israeli legislature (the Knesset) could pass emergency legislation which could violate normal principles of civil liberty as the Knesset saw fit or needed. It has passed and renewed emergency legislation covering a wide range of areas of Israeli society and commerce (Kirshbaum 2007).

Cabili et al. (2014) compiled the following regarding the general state of emergency:

Who may declare the state of emergency and under what conditions?

According to Article 38(a) of the Basic Law: The Government: "Should the Knesset ascertain that the State is in a state of emergency, it may, of its own initiative or, pursuant to a Government proposal, declare that a state of emergency exists". However, the Government itself has the power to declare a state of emergency, meeting the conditions of Article 38(c) of the Basic Law: The Government: "Should the Government ascertain that a state of emergency exists in the State and that its urgency necessitates the declaration of a state of emergency, even before it becomes possible to convene the Knesset, it may declare a state of emergency..."

Moreover, the Knesset's rules of procedure [...] set a number of conditions and procedures regarding the declaration (both by Government and the Knesset). For example, the Knesset's decision to declare a state of emergency will not be accepted without a recommendation from the joint committee, that includes the Knesset's Constitution, Law and Justice Committee and the Foreign Affairs and Defense Committee (hereinafter: the joint committee). The joint committee must submit her recommendation to the Knesset for approval. If the recommendation is regarding renewal of a state of emergency, the recommendation must be submitted to the Knesset's approval no later than 14 days before the state of emergency comes to end.

If a state of emergency has been declared by the government, the government must immediately notify the Speaker of the Knesset and the chairman of the joint committee. The committee should discuss the declaration and submit the recommendation to the Knesset for approval "as soon as possible".

According to Article 38(d) to the Basic Law: The Government, the declarations should be published in the official Gazette (Reshumot) and "should publication in Reshumot not be possible, another appropriate manner will be adopted, provided that notification thereof be published in Reshumot at the earliest possible date".

Statutes that come into force during emergency

The Validity of many laws that were passed over the years depends on the existence of a declaration of a state of emergency. If this declaration will be terminated, these provisions/laws will be repealed along with termination of the state of emergency. Hence, a state of emergency in Israel is consistently extended.

Among the above mentioned laws one can find specific provision of the Tort Ordinance; the Emergency Land Requisition (Regulation) Law, 1949; provisions of the Legal and Administrative Matters (Regulation) Law [Consolidated Version], 1970; the Emergency Powers (Detention) Law, 1979, that provides the legal framework for administrative detentions (see below); the Law Governing the Control of Commodities and Services, 1957, which enables to impose regulation on the market. The law enables that by using orders that allow for general control over commodities and services, including price control, control over sales and purchases of goods and services that were declared as "subjects to control" and control over the actions and conduct of factories engages in "crucial activity", as it is defined by the law; Prevention of Terrorism Ordinance, 1948; and more.

How does a state of emergency end?

The duration of a declaration of a state of emergency by the Knesset will be in accordance with the period prescribed in the declaration, but may not exceed one year.

The Knesset may repeatedly declare a state of emergency (renew the declaration as stated); as mentioned, every year she does so. In fact, since the declaration of independence in 1948, Israel has been under the declaration of a state of emergency, which is yet to be revoked.

As to a declaration made by the Government, according to Article 38(c) of the Basic Law: The Government, "the declaration's validity shall expire upon 7 days from its proclamation, if not previously approved or revoked by the Knesset, pursuant to a decision by a majority of its members; should the Knesset fail to convene, the Government may make a renewed declaration of a state of emergency as stated in this subsection".

As mentioned, the Knesset has the power to terminate a declaration of a state of emergency at any time, regardless the question what branch of the government declared it (such termination should be published in Reshumot)

Besides this, there is primary (Knesset) legislation that allows the declaration of specific states of emergencies, independently of the existence of a general state of emergency. For example, (see chapter 2.2,)

The Police Ordinance was modified in 2005 in order to authorize the Minister of Internal Security to declare a state of "mass disaster" for a period of up to 48 hours. Upon its application, police officers are responsible for the control and command of all on-site operations during the event. Accordingly, the police are authorized to direct operations of all first responders, to confiscate any resource needed by rescue agencies (regardless of ownership) and to close areas or prohibit entrance or exit (WHO 2012).

3 Organisation

3.1 Organisational chart

The following organisations have a crucial role in the Israeli crisis management (in terms of the DRIVER understanding of crisis):

- Government Ministries, especially
 - o Prime Minister's Office
 - o Ministry of Public Security
 - o Ministry of Foreign Affairs
 - o Ministry of Defense
 - o Ministry of Health
- Public security bodies
 - o The Israel Police
 - o (National) Fire and Rescue Authority
- Magen David Adom
- Israel Defense Forces, including the Home Front Command
- National Emergency Authority/ Reshut Heyrum Le'umit

Further institutions not dedicated to crisis management services might be involved, e.g. Israel Airports Authority, Israel Ports Company.

In the event of a non-war emergency, the Israel Police are the first responders and have operational responsibility over all the rescue services such as Magen David Adom (MDA) and the Fire Service. In these cases, the Police is in charge (incident commander), and the National Emergency Authority (NEMA), established in 2007 as part of the Ministry of Defense, is taking care of the inter agency coordination.

The Ministry of Public Security is responsible for the operational preparation and the readiness for emergencies and crisis, of all the authorities subjected to it: the Israel Police, the Israel Prison Service and the Fire and Rescue services. In case of a large scale event, the incident management can be handed over from the Police to the Home Front Command (HFC), a section of the Israel Defense Forces (IDF), by a governmental decree (never happened so far). In other events, HFC is involved with tasks such as Search & Rescue (Ministry of Public Security 2014; expert interview).

In the following, tasks and responsibilities of the Ministry of Public Security, the Police, the Fire and Rescue Authority, MDA, HFC, and NEMA will be described in detail.

Ministry of Public Security

Following an overview document provided by the Ministry of Public Security (Ministry of Public Security 2014c), the Ministry

was founded in 1948 as the Ministry of Police. Its Minister has three areas of responsibility – public security, law enforcement and corrections – as well as a number of operational bodies: The Israel Police, Israel Prison Service, Israel Fire and Rescue Authority, Israel Anti-Drug and Alcohol Authority and the Witness Protection Authority.

The Ministry's vision is

to bring about a significant improvement to the personal security, sense of security and communal security of the citizens of Israel; and create a law-abiding society that rejects violence and crime, all in order to provide a higher quality of life for the citizens and residents of the state of Israel.

The Ministry's mission is

to serve as the primary arm of the Israeli government responsible for law enforcement, crime prevention, safeguarding lives and property, maintaining public order, protecting the public from terror attacks, incarcerating and rehabilitating criminals, protecting witnesses, preventing violence in society, preventing drug and alcohol abuse, preventing and fighting fires and overseeing firearm licensing.

About the Ministry

The Ministry of Public Security carries out its public security operations and responsibilities through its operational bodies: The Israel Police, the Israel Prison Service, the Israel Fire and Rescue Authority, the Israel Anti-Drug and Alcohol Authority and the Witness Protection Authority.

The administration of the Ministry of Public Security is headed by a Director-General, under whom serve four Deputy Directors and other department heads. The main Deputy Director oversees various departments in the Ministry and takes over for the Director-General in his absence; while the other three Deputy Directors are responsible for operations, human resources, and the Planning, Budget and Monitoring Department.

The operational bodies of the Ministry coordinate their operations with the Minister through his Security Secretariat. The Security Secretariat also aids the Minister in formulating operational policy, monitoring the activities of the bodies and more. The Ministry collaborates with other organizations throughout the world to promote public security; and does so through its International Relations Department, which aims to promote cooperation and develop relations with parallel ministries, institutions and organizations abroad.

Policy targets of the Ministry

- *Significantly improving the level of personal and communal security*
- *Fighting organized crime, severe crime & public corruption*
- *Improving operational readiness for emergencies*
- *Reducing road accidents*

- *Improving rescue and recovery capabilities*
- *Improving security measures, detention conditions & the rehabilitation of prisoners*
- *Increasing the efficiency of the Ministry*
- *Strengthening international cooperation*

Emergency preparedness at the Ministry of Public Security

The Ministry of Public Security is responsible for the operational readiness of all the authorities subject to it in times of emergency and during crisis situations. The Ministry is responsible for Israel's first responders – the Israel Police and the Israel Fire and Rescue Authority. During crisis situations the Ministry is in contact with the various agencies and organizations that aid in emergencies, and coordinates operations with the operational bodies under its authority.

In times of emergency, the Ministry works to:

- *Establish a clear picture of the situation and aid the Minister in policy formation and decision making and to provide guidelines in the areas under his authority*
- *Carry out the instructions of the government and the military cabinet*
- *Preserve the normal fabric of life in Israel and keep essential institutions open*

Emergency Fusion and Operations Center

In order to provide the Minister with up-to-date information and aid him in formulating policies and decision making in times of crisis, the Ministry operates an advanced Emergency Fusion and Operations Center, which provides a common operating picture of the emergency and rescue agencies. The Emergency Fusion and Operations Center aids in evaluating risks, providing situational assessments and making recommendations for the best and most relevant policy.

The Emergency Fusion and Operations Center is manned by representatives of the Israel Police, the Israel Prison Service, the Israel Fire and Rescue Authority, the National Emergency Authority, the Home Front Command and others. In addition, the Ministry is assisted by a group of volunteers – former senior officers – that aid the Ministry with their professional and operational experience in dealing with emergency situations, and act as the Ministry's liaisons with other agencies in times of emergency.

Logistics and Continuous Functionality Forum

In addition to the fusion center, the Ministry also employs a forum which works to provide the Ministry with logistic solutions by overseeing the Ministry's operational bodies and responding to any logistical needs, with the goal of keeping essential institutions running and functional.

Emergency & Crisis Situation Think Tank

The Ministry has a Crisis Situation Think Tank which assists the Minister in decision making, risk management, formulating alternative courses of action and aiding in public relations and media strategy.

Israel Police

The Israel Police operates in compliance with the Police Act of 1971 and additional articles of legislation.

The Israel Police is under the Ministry of Public Security. It is a national level police force, comprised of some 30,000 sworn officers reinforced by 40,000 volunteers.

The Israel Police is the only police organization in Israel and therefore its work includes all aspects of conventional policing, from the local through the national levels. In addition, it has an important role in the fight against terrorism. Its work is guided by the values and principles of the democratic government of the state of Israel.

The task of the Israel Police is to maintain the quality of life, law enforcement and enforcement of traffic regulations, as well as providing guidance on preventive measures for the safety and protection of the population (information provided in context of expert interview, 2014).

Disaster management

Israel Police is the first responder to any emergency event and responsible for solving the immediate situation. In case of an on-going event the Israel Police is responsible for integration of all emergency forces & command & control of the event (ibid.).

Fire and Rescue authority

The Fire and Rescue services are in charge of preventing, extinguishing, and preventing the spread of fires; as well as rescuing people and salvaging property. The firefighters deal with fires in homes and open spaces; handle hazardous substances; rescue victims from road accidents; and any other life and property saving scenario.

The Fire and Rescue Commission operates under the authority of the Ministry of Public Security. The Minister of Public Security is the minister in charge of appointing the Fire and Rescue Commissioner. Currently, the commissioner is Shahar Ayalon. [...]

Background

According to the Firefighting Services law of 1959, the Fire and Rescue services are in charge of putting out and preventing fire, as well as rescuing people and property. The fire and rescue services are municipal services, provided within the framework of municipal unions and municipal firefighting units, and they are in charge of incidents that occur within their jurisdiction.

The Structure of the Firefighting Alignment in Israel

The Fire and Rescue services in Israel are made up of 24 authorities, 20 of which are municipal unions for fire and rescue services, and four which are municipal divisions. The firefighting services are spread across 95 fire stations all over the country.

The service is headed by a commander, who is responsible for the daily operational implementation of the service, and who is subjected to the management of the firefighting authority.

As of 2011 there were a total of 1,900 firefighters, engineers and administrative workers in the fire and rescue services (Ministry of Public Security 2014c).

Magen David Adom

Magen David Adom (MDA) in Israel was established in 1930.

MDA is a national organization, and works in cooperation with other emergency and security authorities (Israeli Police, IDF, Fire fighters etc.)

MDA's objectives and its legal status are defined in section 3 of the Magen David Adom Law passed by the Knesset (Israel's Parliament) on July 12, 1950:

- *to carry out the functions of a national society, to be an auxiliary service to the Israeli Defense Forces in time of war and to be prepared for this in times of peace;*
- *to provide pre hospital emergency medical services.*
- *to provide the national blood services incl. collecting, processing, distributing and storage services of blood, plasma and their by-products;*
- *to carry out any additional functions determined by the Society's By-Laws;*

MDA stats of 2012:

- *In 2012, MDA answered and treated 637,004 calls received from all over Israel.*
- *MDA Blood services collected 300,000 Blood Units from volunteering citizens.*
- *70,000 people (workers, volunteers and citizens) received MDA training courses*

Article 49 of MDA's By-Laws confers the following additional duties of the Society

- *instruction of first aid and pre-hospital emergency medicine;*
- *maintaining a volunteers infrastructure and training them in first aid, basic and advanced life support including Mobile Intensive Care Units;*
- *transportation of patients, women in labor, and evacuation of those wounded and killed in road accidents;*
- *transportation of doctors, nurses and medical auxiliary forces;*

MDA belongs to the International Red Cross and Red Crescent Movement and is Israeli Red Cross National Society.

In this capacity, MDA is providing training and humanitarian aid to countries in need, all over the world (MDA 2014).

Home Front Command

The Home Front Command (HFC) is a section of the Israel Defence Forces (IDF), created in 1992. Its objectives are

- *To constitute the main professional authority for civilian protection in the following areas: Extrication, rescue, the chemical and biological threat on the home front and hazardous materials*
- *To constitute a civilian protection service*
- *To constitute chief operational headquarters for army units intended for the home front*
- *To constitute the staff for forming the forces/ units for the Home Front Command*
- *To make up the command force (HFC 2014).*

The Home Front Command operates in various emergency situations, specializing in the field of civilian protection. In times of crisis or war, the Home Front Command operates to its fullest capabilities, using all its resources in order to instruct the civilian population on how to cope with the threats facing Israel. The purpose of the Home Front Command is to save lives. The Home Front Command operates search and rescue missions in Israel and around the world, aiding in rescue and recovery from incidents such as terror attacks, floods, conflagrations, etc.

Search and Rescue

The IDF National Search and Rescue Unit, under the Home Front Command, is a highly skilled force trained to execute special search and rescue missions, both in Israel and abroad. The unit was founded in 1983, and its' expertise is in rescuing people trapped under ruins.

The unit is comprised primarily of reservists who are always on call, with prepared kits to enable immediate departure, and a small core of soldiers in mandatory service. In addition to the rescue teams, the unit employs doctors, engineers, mechanical engineering equipment operators and rescue dog handlers.

In November 2003 the first Search and Rescue Company, the Shavit Company, was founded in response to the need for a large operational S&R force that would be available at all times. Subsequently, two additional companies, Hetz and Rotem, were established. The soldiers are all graduates of the Search and Rescue course, and are trained in first aid, Krav Maga, infantry, ABC (atomic, biological, chemical) warfare, and more.

The unit is on-call 24 hours a day and are deployed whenever there is a disaster – earthquakes, tsunamis, conventional or unconventional terrorist attacks. The S&R companies also assist IDF infantry forces during routine operations (IDF 2014).

National Emergency Management Authority (NEMA)

NEMA was established in 2007, as part of the Ministry of Defense, and is responsible for preparing Israel's home front for any potential emergencies. This is accomplished by directing and coordinating among emergency organizations, government offices, local authorities, and other relevant institutions.

NEMA is responsible for creating sustainable plans to ensure preparedness of the home front for all types of emergency; ensuring appropriate critical resource reserves (such as fuel, food, water and so on); initiating research in the field of emergency preparedness; promoting activities designed to improve the population's resilience to emergencies; centralizing information collection and distribution; and coordinating the activities of the various government ministries during emergencies. NEMA's responsibilities cover all components of emergency management, including disaster risk reduction, prevention, mitigation, response, reconstruction and rehabilitation activities.

As part of the coordination mechanism, NEMA operates a National Council for Emergency Management, headed by either the Deputy Minister of Defense or the Minister of Civil Protection (depending on the structure of the government at the time). Senior representatives from all government ministries serve as members on this Council. Its major role is to coordinate activities designed to prepare the nation for all hazards and to manage an emergency upon its occurrence. The policies mandated by the Council are implemented by NEMA, so regular evaluations of all government agencies are conducted by this body to assess the ongoing state of preparedness. The organization and structure established at the national level are mirrored at the regional district levels.

In order to ensure proper implementation of emergency preparedness and management, each government ministry has created and maintains a national authority that is responsible for directing operations of the agencies under its jurisdiction during emergencies. For example, the MoH [Ministry of Health] operates a Supreme Health Authority (SHA) that is responsible for coordinating the operations of all health agencies in preparation and management of emergency situations.

NEMA integrates the activities of all ministries, organizations and bodies relevant to effective emergency preparedness and management.

In routine times, NEMA coordinates on a national level several activities designed to ensure emergency preparedness. It prioritizes potential threats; conducts risk analysis; develops national emergency policies; presents to the government annual reports on home front preparedness levels; promotes and leads relevant legislation in the state cabinet and parliament; coordinates international cooperation including exercises and workshops as well as work information-sharing; and leads the building and enhancement of population resilience.

During periods of emergency, NEMA operates the National Emergency Management Center that serves as a supreme operations centre designated to monitor and report a real-time situation analysis to the government; supervises the fulfilment and implementation of directives/instructions disseminated by the Minister of Defense; coordinates with the National Information Directorate the general information dissemination activities; advises the Minister of Defense and the government regarding key decisions that need to be implemented in real

time to ensure effective emergency management; and activates the national resilience system (WHO 2012).

Emergency Economy

The Emergency Economy is a body created in 1955 to ensure continued activity of vital enterprises during an emergency. An Emergency Economy order allows the recruitment of workers for essential private and public services, such as emergency services, medicine, local authorities, food and equipment supply, communications, and any other service deemed vital. Until 2010 the Emergency Economy was responsible for preparing the local municipalities for emergencies, including absorption of evacuees from disaster stricken areas.

A Supreme Emergency Economy Committee was created in 1986, headed by the Minister of Defense or a senior deputy. The directors-general of all government ministries, the head of the Jewish Agency and the chairpersons of the local municipalities, IDF and police are members of this committee, which is responsible for the ongoing effective operation of similar structures in regional districts and local municipalities. In 2010, a few years after the establishment of NEMA, the Emergency Economy was integrated into NEMA as an integral component of the multisectoral emergency management system (ibid.).

Despite defined roles and responsibilities in laws and regulations, it has also been stated that situations in reality can be different, and that points of views concerning specific responsibilities sometimes differ between organisations (expert interview).

3.2 Organisational cooperation

As described in chapter 3.1, NEMA has strong responsibility on coordination among emergency organisations.

Regarding receiving international assistance to Israel, main involved institutions are the Ministry of Foreign Affairs, the Primary Office, and NEMA. NEMA provides recommendations to the Primary Office, and the Ministry of Foreign Affairs sends out requests for international support. Further involved institutions (e.g. Ministry of Health) depend on the type of crisis.

There are “National Guidelines for Receiving International aid in times of emergency” (see description of the national emergency exercise in chapter 5.3), while further information on these guidelines could not be obtained in the framework of this study.

The activations overview of the EU Civil Protection Mechanism 2007–2012 shows one request for assistance from Israel. Assistance was delivered for fighting severe forest fires in December 2010 (EC 2013).

Regarding giving assistance, the Search and Rescue unit of the HFC (see chapter 3.1), has been active all around the globe (expert interviews).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

There are many written SOPs for specific occasions, but usually not available in English, and/or available in open sources. They are constantly activated and used in crisis situations. They are also tested in exercises (expert interview).

4.2 Operations planning

The operation planning process is not standardised (expert interviews).

4.3 Logistics support in crises

Private logistic providers are involved in all missions, they are needed for almost all services. Military logistics provide support in large crisis as well (expert interview).

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

Israel's communication system in general *is considered to be the most highly developed in the Middle East. Its domestic system comprises both coaxial cable and microwave radio relay; all systems are digital. Four privately owned mobile-cellular service providers offer countrywide coverage. International communications are supported by submarine cables to Europe, parts of the Middle East and satellite earth stations. There are nearly 10 million cellular/mobile lines and 3.3 million land lines. In 2009 there were 4.5 million internet users in Israel.*

The state broadcasting network, operated by the Israel Broadcasting Authority, broadcasts on two television channels in Hebrew and Arabic. There are five commercial channels and cable TV provides access to foreign channels. The Israel Broadcasting Authority also broadcasts over eight radio stations and Israel Defense Forces (IDF) Radio broadcasts over two. In addition, there are approximately 15 privately owned radio stations (WHO 2012).

Regarding crisis communication to the public, the spokesperson at the Prime Minister's Office (National Information Directorate) is responsible for crisis communication on the national level. He also coordinates to the different Ministries involved (expert interview).

At the Ministry of Public Security, *a Crisis Communication Team was recently established. The team constructs a situational picture of all the emergency agencies, monitors traditional and new media – both in Israel and abroad – and formulates messages and instructions to the public. The messages are*

formulated together with the Ministry's operational bodies as well as the National Information Directorate in the Prime Minister's Office.

The Crisis Communication Team is staffed by Ministry employees from the Ministry's Information and Knowledge Unit – responsible for the Ministry's digital presence – and members of the Ministry's Spokesperson's Unit. The team utilizes additional Ministry staff members who speak foreign languages, as well as retired police officers with professional experience in public information and community relations, who volunteer their time in emergency situations.

To more effectively reach the public, the Ministry is currently in the process of developing a smartphone application that will provide information and instructions for emergency situations, such as natural disasters, severe weather, forest fires and more. General instructions about these scenarios will be available at all times, while targeted messages with specific instructions will be sent according to the user's location. This is yet another platform aimed at preparing and informing the public in order to save lives and strengthen the community's resilience during a disaster (Ministry of Public Security 2014h).

By law, the HFC is responsible for instructing the public in specific cases, e.g. where to go, and where not to go. Constant assessments analyse using surveys, how the public perceives respective instructions, in order to adapt them in the best useful way (expert interview).

General instructions for the public on preparedness as well as on how to behave during different incidents (e.g. earthquake, fire, and flood events) is also provided on the HFC website (HFC 2014b).

To achieve situational awareness, a Command & Control system is in use, which is coordinated by NEMA and is being fed by all Ministries and all levels, from local to national (expert interview).

For information on the use of social media in emergency situations see chapter 1.6.3.

5 Capabilities

5.1 Human resources

Numbers of permanent emergency and disaster management personnel – staff and volunteers – are as follows:

Israel Police

- Staff: 30,000
- Volunteers: 40,000

Fire and Rescue Authority

- Staff: 1,800
- Volunteers: 1,000

Magen David Adom

- Staff: 1,600
- Volunteers: 10,000

HFC

- Classified

(expert interview; personal information 2014).

Some more information on volunteers at the Fire and Rescue Authority, MDA, and the Israel Police is provided at the respective websites:

Fire and Rescue Authority:

In the Israel Fire and Rescue Authority there are about 800 young volunteers (Fire Scouts) and some 1,000 adult volunteers. Fire Scouts are youth that volunteer in the Fire and Rescue Authority as part of their “personal commitment” hours in grades 10-12, and help out at fire stations and aid the firefighters (Ministry of Public Security 2014c).

Magen David Adom:

Volunteers have founded and been active in MDA since the organization got under way. Already at the first MDA convention, Dr. Yosef Koot, provisional chairman of the Executive Committee, spoke at length about the importance of volunteering in MDA - “MDA considers the volunteers a vital part of its’ activities. When new branches were opened, we didn’t see the importance in setting up ambulance positions alone. The main point was the volunteers: Our aim is to educate people to become volunteers who are ready and willing to devote their time, money and blood for the benefit of their fellow man.” Today over 13,000 highly trained volunteers are active throughout the country, of which half are youth volunteers serving as part of the crews on ambulances and Mobile Intensive Care Units and “MDA cadets”, who represent MDA’s humanitarian youth movement activities (MDA 2014).

Among the volunteers from the Israel Police, a specialist operational unit is the Israel's Volunteer Search and Rescue Team (Ministry of Public Security 2014g).

The Social Survey, a current annual survey, which has been conducted by the Central Bureau of Statistics (CBS) since 2002, revealed that in 2013, 20 % of the population aged 20 and over in Israel engaged in volunteer activity (covering all sectors): 25 % not permanent or one-time, 38 % 10 hours and more, and 37 % up to 9 hours (CBS 2013).

5.2 Materiel (non-financial) resources

Up to date information on material resources could not be obtained in the framework of this study.

According to a report from 2005, the government holds in storage a stock of blankets, mattresses and beds, to be used in emergencies. There is a yearly budget for renewing and buying of stocks such as: equipment, medicines, essential food items and fuel. There are many water containers for use in emergencies. The Electric Company and the Water Company have many power generators (Laor 2005).

5.3 Training

There is no specific certification system – each organisation sets its own standards on training of its personnel (expert interview).

The Israel Fire & Rescue Authority has a Training Department: “The Israel Fire and Rescue Training School was established in 1979 in Rishon Letzion. The school provides training for all types of firefighting roles, as well as for additional bodies, including prison service personnel, electric company employees and staff from the Nuclear Research Center” (Ministry of Public Security 2014c).

The Home Front Command also has a training center, the “Commanders’ Training Simulative Center” (CTSC). “Operational since 2010, CTSC offers complete training, debriefing, documentation and learning environment in Civil Defense and Homeland Security scenarios” (HFC 2014c).

Annually, national exercises e.g. on earthquake or tsunami scenarios, are conducted including all main players in the civilian area. International exercises, which are conducted especially on earthquake scenarios, include e.g. UN, and Red Cross organisations (expert interviews).

For example, the Ministry of Public Security describes on its website the national emergency exercise “Ends of the Earth”, which was held in November 2013 and focused on receiving international aid and collaboration between staff and organisations (Ministry of Public Security 2014d):

The exercise will examine the ability of government ministries to coordinate their operations and receive international aid, as well as allocate the aid to forces in the field and relevant agencies. “Ends of the Earth” will include the simulation of various systems that deal with the receiving of international aid in times of emergency and during destructive earthquakes.

The exercise is being conducted according to the National Guidelines for Receiving International Aid and will examine the staff work in various ministries and agencies involved, as well as field operations for receiving materials and aid.

Additionally, the exercise will examine the implementation of the National Guidelines for Receiving International aid in times of emergency, taking into account lessons learned from the Mt. Carmel fire and previous national emergency exercises.

Goal of the exercise

The idea behind the exercise is collaboration – collaboration between the staff in the field and between various ministries and agencies in order to efficiently receive international aid.

Participants in the exercise:

- *All government ministries, with an emphasis on the Prime Minister's Office, the Ministry of Home Front Defense, the Ministry of Defense, the Ministry of Public Security and the Foreign Ministry*
- *All public security bodies: the Israel Police, Israel Prison Service, National Fire and Rescue Authority and MDA*
- *The IDF, including the Home Front Command*
- *The Israel Airports Authority*
- *The Israel Ports Company*
- *Municipalities*
- *International representatives from the OSOCC, NATO, the EU and the Red Cross*

In light of recent regional changes and the constant threats facing Israeli, the Ministry of Public Security is responsible for preparing the home front and improving the Ministry's operational bodies' response capabilities for emergency situations and other threats. The Emergency Preparedness Department in the Ministry is headed by Police Brigadier General Chaim Cohen, who is leading the Ministry in improving its preparedness for emergency and crisis situations, and also is responsible for organizing the international aid operations within the Ministry and its operational bodies and for coordinating with other government ministries.

The "Ends of the Earth" exercise is the high point of intensive collaborative efforts of the Emergency Preparedness Department with aid agencies, the Ministry of Home Front Defense, the Home Front Command and other government ministries. "This exercise is an essential tool for us to examine the functioning of all systems so that we can be fully prepared and work at our best in a real life situation," says Brigadier General Chaim Cohen, head of the Emergency Preparedness Department.

5.4 Procurement

Only little information on procurement regulation and procedures in crisis management in Israel could be gained in the framework of this survey. There seem to be only few regulation (or not much implemented regulation), single crisis management organisations have their own rules, while general directives play a minor role (expert interviews).

In general, Israel publishes most public procurement information on its central procurement website: www.mr.gov.il. Furthermore, procurement laws and policies, specific guidance on application procedures such as templates and forms, procurement plans, and contract modifications are also published on the central procurement website. Meanwhile, information on contract awards (name and amount of selected contractor) is only published on the Regulations, Funds and Economy Ministry website (OECD 2011).

5.5 Niche capabilities

MDA (Magen David Adom), belonging to the International Red Cross and Red Crescent Movement and being the Israeli Red Cross National Society, provides training and humanitarian aid to countries in need, all over the world (MDA 2014). Further specific information on niche capabilities, which would be of interest to the EU crisis management, could not be gained in the framework of this study.

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Magen David Adom in Israel, December 2014

National Emergency Authority, December 2014



Driving Innovation in Crisis Management for *European* Resilience

MONTENEGRO

Policy, Legislation, Organisation,
Procedures & Capabilities (PLOPC) in
crisis management and disaster response



Responsible Partner: CSDM (Valeri Ratchev)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by FhG-INT and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Despite its relatively small territory and size of population, Montenegro is highly exposed and vulnerable to natural hazards. The country has to address primarily earthquakes, wild fires and hydro-meteorological phenomena such as floods, droughts, heat waves, and heavy snowfall. Of particular concern are the frequent landslides and rock falls linked to the country's mountainous terrain.

As most of the other former Yugoslavia countries, Montenegro's authorities have been developing the national civil protection system since 2006 on what remained from the federal institutions, applying modern global and European practices and standards. Gradually, the civil protection mechanism has moved away from the former "civil defence." In result, the country's framework on civil protection and disaster relief is not contained in a single formal document. However, in terms of legal arrangements and policy statements, the harmonisation with international norms and standards is relatively successful.



At the policy level, the National Strategy for Emergency Situations defines the risks and responsibilities of different state, local, and private authorities to deal with such. Directorate for Emergency Situations has been established to implement mechanisms for prevention, preparedness and response. The Law on Rescue and Protection is the core legal act, supplemented by the Environment Law (1996), Law on Waters of (1995), Law on Protection against Natural Disasters (1992), Law on Protection of Air against Pollution (1980), and others. The principal political-managerial body on civil protection is the National Coordination, headed by the Prime Minister and the ministers are remaining members. The core administration of civil protection is provided by the Ministry of Interior and Administration (MoI).

Introduction of an emergency regime is a right and obligation of the Parliament.

The civil protection concept is comprehensive and relatively well balanced among the state, the municipalities (21 in numbers), business, and private citizens.

By way of comparison with best practices, the country's civil protection framework does not require development of hazard-specific contingency plans.

Montenegro is engaged in the Southeastern European international co-operation for risk reduction and disaster response.

On September 29, 2014, Montenegro and the European Union signed an agreement paving the way for Montenegro's membership in the EU Civil Protection Mechanism as the 32nd member of this community. According to the official statement, "Montenegro's membership in the EU Civil Protection Mechanism strengthens the Mechanism and enhances Montenegro's capacities to respond to natural disasters. It will also help the country with further harmonisation with the EU norms and procedures required under the EU legislation. In addition, the country will benefit from the ever-improving and developing European monitoring tools and early warning systems as well as satellite imagery and mapping services. It will be able to participate in the EU trainings and exchanges of experts programme and will be eligible for the EU co-financed disaster prevention and preparedness projects and civil protection exercises."²³²⁶

²³²⁶ The European Commission' EU Civil Protection Mechanism, available at http://ec.europa.eu/echo/news/eu-civil-protection-mechanism-welcomes-montenegro-future-member_en.

Table of Contents

MONTENEGRO Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1735
Overview	1736
Table of Contents	1738
List of Figures	1740
List of Tables.....	1740
List of Abbreviations.....	1741
1 Policy	1742
1.1 Risk Assessment.....	1744
1.2 Policy and Governance	1749
1.2.1 Strategy scope and focus.....	1749
1.2.2 Monitoring and analytical support to policy making; R&D	1750
1.2.3 Policy for Prevention	1752
1.2.4 Policy for Preparedness.....	1753
1.2.5 Policy for Response	1754
1.2.6 Policy for Relief and Recovery.....	1755
1.3 Financing.....	1755
1.3.1 Investing in preparedness	1756
1.3.2 Investing in consequence management.....	1757
1.4 Policy review, Evaluation & Organisational Learning	1757
1.4.1 Post-Disaster Assessment.....	1757
1.4.2 Departmental Lessons Learned systems	1757
1.4.3 Centralised (national) Lessons Learned system	1758
1.4.4 International exchange for Lessons Learned.....	1758
1.4.5 Regular policy reviews.....	1758
1.5 Resilience	1758
1.6 Information sharing and data protection	1759
2 Legislation	1760
2.1 Crisis (emergency, disaster) management concept.....	1760
2.2 General crisis (emergency, disaster) management law.....	1761
2.3 Emergency rule	1762

2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1762
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1764
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1764
2.7	Legal regulations for international engagements of first responders and crisis managers	1765
3	Organisation	1767
3.1	Organisational chart	1767
3.2	Organisational cooperation	1775
4	Procedures	1777
4.1	Standing Operating Procedures (SOPs) and Guidelines	1777
4.2	Operations planning	1777
4.3	Logistics support in crises	1778
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1779
5	Capabilities	1780
5.1	Human resources	1780
5.2	Materiel (non-financial) resources	1781
5.3	Training	1781
5.4	Procurement	1783
5.4.1	Procurement regulation	1783
5.4.2	Procurement procedures	1784
5.5	Niche capabilities	1785
	Resources	1786
	Legislative acts	1786
	Directives	1786
	Official documents (white papers, strategies, etc.)	1786
	Online resources (e.g. websites of key CM organisations)	1786
	Publications	1787

List of Figures

<i>Figure 1. Montenegro in the region of the Western Balkans</i>	<i>1742</i>
<i>Figure 2. Seismic activities in Montenegro in 2012.</i>	<i>1747</i>
<i>Figure 3. Organisation of the Directorate for Emergency Situations within the Ministry of Interior.</i>	<i>1768</i>

List of Tables

<i>Table 1 Strengths and weakness in Montenegro policy on disaster risk reduction, protection and relief.</i>	<i>1743</i>
<i>Table 2 The most dangerous natural disasters in Montenegro 1900-2014.</i>	<i>1745</i>
<i>Table 3. Seismic risk, area and potentially affected population in Montenegro.....</i>	<i>1746</i>
<i>Table 4. Organisational chart of the Institute for Hydrometeorological and Seismological Service of Montenegro.</i>	<i>1774</i>
<i>Table 5. Functional scheme of Montenegro disaster (floods and seismic) response system</i>	<i>1775</i>
<i>Table 6. The flying experience of the Helicopter unit in 2013</i>	<i>1781</i>

List of Abbreviations

DES (SES)	Directorate for Emergency Situations (<i>formerly</i> Sector for Emergency Situations and Civil Protection)
DPPI	Disaster Preparedness and Prevention Initiative
DRR	Disaster risk reduction
EC	European Commission
EU	European Union
EMCT	Emergency Management Coordination Team
GIS	Geographical Information System
HFA	Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters
IHMS	Institute of Hydro-meteorology and seismology of Montenegro
MoD	Ministry of Defence
MoI	Ministry of Interior (In some documents: Ministry of Interior and Public Administration)
MRC	Montenegro Red Cross
NGO	Non-governmental organisation
OG	Official Gazette of Republic of Montenegro
SEE	South-East Europe (Southeastern Europe)
SFRY	Socialist Federal Republic of Yugoslavia
SZCG	Seismology Institute of Montenegro
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner on Refugees

1 Policy

A national policy of civil protection has not existed in Montenegro until independence.²³²⁷ While the country has been in different state configurations,²³²⁸ all responsibilities for disaster risk management and civil protection had been assigned to various ministries, having neither a single political document nor legislation. After obtaining independence²³²⁹ in 2006, the new Government has adopted National Strategy for Emergency Situations, aimed to establish a ground for building an adequate system of protection and rescue in an emergency, and for policy on risk reduction based on prevention, mitigation and preparedness measures.



Figure 66. Montenegro in the region of the Western Balkans

Table 1 presents conclusions from a SWOT analysis made by an international needs assessment study of Montenegro's disaster risk reduction, protection and relief. (EU-UNDP, 2011).

²³²⁷ However, Dr. Petar Miljanić has conducted the first systematic measuring in Montenegro on 1 September 1882 in Podgorica. The measuring included basic climate elements, atmospheric temperature, precipitation, and humidity, atmospheric pressure and wind direction.

²³²⁸ For details see <http://www.britannica.com/EBchecked/topic/1251949/history-of-Montenegro>.

²³²⁹ Montenegro has a population of 620,145 people. The country, with a total area 13,812 km², is divided into 23 municipalities. The capital city Podgorica, which has a population of 185,937 and the city of Nikšić, with a population of 72,443, account for almost one third of the total national population. Populations of municipalities are small and the average is under 10,000 people.

Table 41 Strengths and weakness in Montenegro policy on disaster risk reduction, protection and relief. ²³³⁰

Strengths and opportunities	Weaknesses
<p>Experience with disasters;</p> <p>Documented damages;</p> <p>Easy and good communications flow;</p> <p>Relatively high level of autonomy of local governments in creating local development policies and measures;</p> <p>Existence of institutions such as the Institute of Hydro-meteorology and Seismology of Montenegro (IHMS);</p> <p>Network of online stations that connect Seismology Institute of Montenegro (SZCG) with the neighbouring countries;</p> <p>A single system for developing assessments and plans at all levels;</p> <p>Good relationship with NGO's and international organisations;</p> <p>Experienced and knowledgeable management staff;</p> <p>Excellent informal relations and communication between the members of Directorate for Emergency Situations with colleagues in the region and international community.</p>	<p>Montenegro's legal framework often lacks necessary disaster risk reduction (DRR) components. The country has no DRR National Action Plan and lacks the capacities to implement policies, strategies and mechanisms. To avoid overlaps and clarify responsibilities, standard operational procedures need to be developed for all stakeholders involved in disaster response;</p> <p>The absence of specific allocation mechanism for DRR in the national and local budgets leads to insufficient funding for many DRR-related areas. For instance, this prevents the IHMS to operate a 24/7 analysing forecasting system;</p> <p>There is no post-disaster data collection and no database of hazards. A country-level Geographical Information System (GIS) database should be created;</p> <p>Risk assessments taking into account vulnerability and capacity considerations need to be strengthened at local level;</p> <p>Information management lacks established protocols and mechanisms. Little information has been exchanged; hydro-meteorological data, for instance, is not integrated into development plans, agriculture sectorial plans and the like. It is important to define ways for better utilisation of the seismic and hydro-meteorological data produced;</p> <p>The building codes are not properly enforced. Roles and responsibilities regarding the legalisation and approval of constructions should be clarified;</p> <p>Gender issues are currently not mainstreamed into the Montenegrin DRR planning. To tackle this problem, gender sensitive DRR training programmes should be offered to planners in ministries;</p> <p>Climate change adaptation mechanisms are hard to find in the country's DRR approach and no cross-border partnerships for production and utilisation of climate change related data exist.</p>

²³³⁰ IPA Beneficiary Country Needs Assessment: Montenegro (EU-UNDP, 2011), p. 27. Available at <http://www.gripweb.org/gripweb/?q=countries-risk-information/documents-publications/ipa-beneficiary-needs-assessment-montenegro>.

1.1 Risk Assessment

The Strategy of National Security of Montenegro presumes that “Natural, ecological, technical and technological disasters, man-made accidents, and epidemics of human or contagious animal diseases may generate challenges, risks and threats against national security.”²³³¹

Risk identification, assessment and monitoring are mainly organised and implemented at the national level. However, a natural disasters risk assessment study for South East Europe concludes that, “...in many cases, the assessment team witnessed some confusion between hazard and risk identification. ...The Law on Rescue and Protection defines the hazard identification methodology, but very little reflects on risk identification. There are no risk assessments conducted at municipal level or at the level of companies and organizations.”²³³²

Threat assessments are to be developed according to the Ministry of Interior and Public Administration’s “Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters.”²³³³ According to the Rulebook, the risk assessments should describe characteristics of threatened territory, assess the potential impact of different hazards (and thus vulnerability of the area to disasters), explain the human and material capacity to respond to the hazard and identify where material and technical resources, knowledge, organisational structures should be improved.

The Directorate for Emergency Situations (DES), using the Rulebook, drafts the National Plan for the Protection of Extreme Meteorological Occurrences. Along with the DES subordinated units, several ministries provide information and qualitative analysis of threats to DES. The Montenegro Red Cross (MRC) also has conducted vulnerability and capacity assessments in ten pilot communities.

Natural hazards

The National Security Strategy considers as the most significant natural hazards “earthquakes, fires and other natural and technical-technological catastrophes.”²³³⁴ The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters considers as natural disasters earthquakes, fires, floods, snow drifts, avalanches, landslides and subsidence, droughts, storms, hails, frosts, and all other natural phenomena that can endanger the health and lives of a large number of people and cause great material damage.”²³³⁵

The most dangerous natural disasters in Montenegro for the period 1900- 2014 are presented in the Table below:

²³³¹ Strategy of National Security of Montenegro, Art. 3.2, www.gov.me/biblioteka/1154096856.doc.

²³³² EU, UNDP, *Natural Disaster Risks and Risk Assessment in South East Europe*, http://www.gripweb.org/gripweb/sites/default/files/disaster_risk_profiles/SEE%20DRR%20Risk%20Assessment%20Report-Final.pdf.

²³³³ Ministry of Interior Affairs and Public Administration (2007), *Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters*. Available at <http://www.sluzbenilist.me/PrevPropPreuzimanje.aspx?tag=%7B1263BFDF-DD6C-442B-8D06-81C5F33DD0FD%7D>.

²³³⁴ Strategy of National Security of Montenegro, Art. 4.2.

²³³⁵ Ibid, Article 8.

Table 42 The most dangerous natural disasters in Montenegro 1900-2014.

Disaster	Date	Number of total affected people	Number of deaths	Financial lost
Earthquake	April 1979	100 400	136	US\$ 4 billion
Flood	3/12/2010	5000		EUR 44 million
Extreme low temperature with heavy snowfall	Jan.-Feb. 2012	4500		
Flood	12/11/2010	1350		
Flood	26/11/2007	1086		
Flood	25/12/2009	450		

Earthquakes

A thorough analysis on seismic risk was conducted in 1984 by the National Seismologic Institute of Montenegro in cooperation with the Institute for Geological Research of Montenegro and the Institute for Earthquake Engineering and the Engineering Seismology Institute of Skopje (now in FYROMacedonia), largely through research into the effects of the devastating earthquake of April 1979.²³³⁶ This study serves as the foundation for current vulnerability assessment of building stocks. The mentioned institutions constructed a first seismic zoning map of Montenegro and the whole region in 1982. From 1984 to 1988, the Institute for Geological Research of Montenegro realised seismic micro-zoning and maps showing the degree of suitability for constructions for urban areas within all municipalities in Montenegro.²³³⁷

From 1987 on, the seismologic institute of the former Yugoslavia has prepared a series of seismologic maps, which facilitated the establishment of building codes in seismic areas and the Regulations on Technical Norms for Building Construction in Seismic Areas²³³⁸ still in force in Montenegro. An isolated map for the seismogenic zone of Berane was also created. The last hazard map of 2005 is currently being updated, and as part of the NATO' Science for Peace Project it will be harmonised with the seismic hazard maps of other western Balkans countries. However, these are the only studies carried out in the field of hazard characterisation for Montenegro.

The DES considers as a critical priority to enlarge seismic risk assessments to cover the whole national territory, especially for the most populated municipalities located in high-risk zones such as Budva, Herceg Novi, Bar, Ulcinj and Podgorica.

One of the biggest challenges is a large number of informal settlements; these complicate the development of risk analyses because it is difficult to ensure that the data corresponds with reality. (EU-UNDP, 2011) The entire area of Montenegro, and especially its coastal and central part (Zeta-Skadar depression and the Berane basin) is a seismically active area, exposed to low- and medium-intensity earthquakes, and occasionally to devastating earthquakes of large magnitude.

²³³⁶ The Structure, Role and Mandate of Civil Protection in DRR for SEE, (UNISDR, 2008), available at http://www.unisdr.org/files/9346_Europe.pdf.

²³³⁷ Emergency and civil security Directorate of the Ministry of Interior, 2005, National Strategy for Emergencies.

²³³⁸ Official Gazette of SFRY no. 31/81 with amendments no. 49/82, 29/83, 21/88 and 52/90.

Modern research has confirmed the lasting existence of a high level of seismic activity and earthquake hazard in this part of the lithosphere, practically the entire region of Montenegro. The coastal area, the Zeta-Skadar depression and the Berane basin should be highlighted as significant seismically active areas of the country.

The earthquake of 15 April 1979 at the coast and wider area of Skadar Lake had a devastating effect. 101 people were killed in Montenegro and 35 more in Albania (in Shkodër and Lezhë counties), while the injured reached 1172 and 382, respectively. After the earthquake, 100,000 people were left homeless (of which 20% were in Albania).²³³⁹

Damage surveys of circa 58,000 buildings in the affected areas of Montenegro (6 coastal and 6 inland municipalities) showed that worst affected was Ulcinj municipality with 47% of its building stock classified as collapsed or destroyed, followed by the municipality of Bar (37%). Severely affected were also the municipalities of Budvar, Kotor and Cetinje (all three lost circa 22% of their building stock). In total almost 15,000 buildings were destroyed (16% of which in Albania) and another 25,000 were damaged (49% of which in Albania and 4% in Croatia). Damage to historic buildings and other heritage sites of Montenegro was particularly serious, with over 1600 cultural monuments being affected as well 33,000 of works of art and valuable collections. The old towns of Ulcinj, Bar, Budva, Kotor, and Herceg-Novi were so badly damaged that their entire artistic contents had to be rescued and stored elsewhere while the old towns of Budva, Ulcinj and most of Kotor were entirely evacuated as they were in a highly dangerous condition.

The cost of the earthquake according to the Yugoslav government's final estimate was 4 billion USD including 275 million USD indirect losses (7.5% of Yugoslavia's GDP in 1979).

The National Strategy of Emergency Situations (2006) evaluates the seismic risk throughout the country in the following way:

Table 43. Seismic risk, area and potentially affected population in Montenegro²³⁴⁰

Region	Maximum intensity	area		Population	
		Km ²	%	people	%
Coastal region	IX	1,900	13.8	151,000	24.4
Podgorica-Danilovgrad region	VIII	3,030	21.9	205,000	33.1
Central region of Montenegro	VII	7,600	55	229,000	36.9
Seismogenic zone of Berane	VIII	340	2.5	20,000	3.2
Northern region	VI	940	6.8	15,000	2.4

More recently, the seismic activities are concentrated along the seacoast and the Southeastern part of the country. According to the IHMS, last three years the strongest earthquake has been on November 3 2012, with 3.0 Richter magnitudes in the area of Radanovića.

²³³⁹ Damage was also significant in coastal areas of southern Croatia (particularly in the old city of Dubrovnik) and in Southwestern districts of Bosnia-Herzegovina.

²³⁴⁰ Source: National Strategy of Emergency Situations (2006).

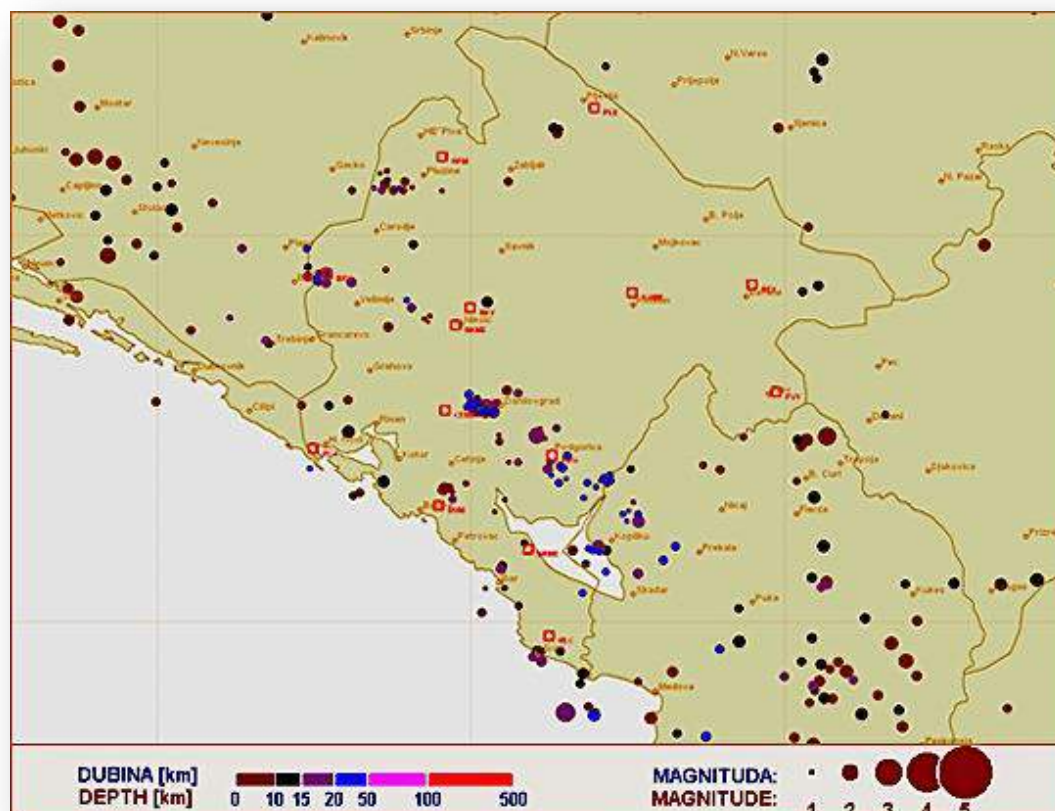


Figure 67. Seismic activities in Montenegro in 2012.²³⁴¹

Heavy rains that cause floods and erosion, including river flooding

Floods are the most frequent natural hazard (there have been six destructive floods in the last 20 years). Pazickopolje and the Lim River valley are most prone to flooding. The biggest floods have been recorded in the upper flow of the Tara and the Lim rivers in 1963, 1979, 1999 and 2000.

The best and most fertile land in Montenegro is regularly flooded. The Pazicko polje is vulnerable to flooding, and flood events were reported there in 1980 and 2001. The valley of River Lim at the estuary of the River Moraca and the Zeta plain are also susceptible to flood. Flooding occurs irregularly in other areas due to the karstic structure.

With average flowing off, which is 40 litres/s/km², and in cubic capacity it is about 19,5 km³/year, Montenegro is a part of 4% of the world territory with the biggest average flowing off. Water is the country's biggest natural resources as 95,3% of watercourses are formed within the country (both source and drainage basin). (UNDP, 2011)

The December 2010 floods had unprecedented water levels, the extent of flooded areas and damage occurred in 12 out of 21 municipalities in Montenegro. Transport routes, electricity supply and communication lines between the northern region and the rest of the country were obstructed for some time and 1.5% of the population had to be evacuated. The "Post-Disaster Needs Assessment following the November – December 2010 Flood Disaster" in Montenegro, estimated the total damages and losses at approximately EUR 44 million, or 1.49% of the 2009 GDP. (ECIS, 2012)

²³⁴¹ Seismicity Maps for Montenegro, available at <http://www.seismo.co.me/maps/jan2010.htm>.

Extreme heat and droughts

According to the available data, i.e. in a series of measurements since 1949, and at some stations and since 1958 until the present day, it is evident that since 1998 extreme heat has started appearing more often, and especially during August. In the Northeastern regions of Montenegro (confluence of the Tara and the Lim), maximum annual precipitation in mm/day has been on the rise since the 80's. However, there is no systematic increase and it has been strictly localised. Strong droughts and increased summer temperatures were recorded in the periods 1981–1990 and 2000–2011.

Cold weather

In January 2012, the country faced a cold freeze, with heavy snowfall blocking access to lifeline services and communications for many communities in the mountainous areas. The Government had to declare a state of emergency and national and international resources had to be mobilised to provide humanitarian relief to the stranded areas.

Technical and technological disasters

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters considers as “technical and technological disasters: great fires, demolitions or impounding reservoir overflows, expansions and explosions of gases and hazardous substances, radioactive and other types of pollution of air, water, land and foodstuff of herbal and animal origin, great disasters in road, rail and air traffic, nuclear/radiological, chemical and biological disasters, mining disasters, ground settlements due to minerals exploitation, and other similar phenomena that can endanger the health and life of a large number of people and cause great material damage.”²³⁴²

Major technogenic hazards include oil storages along the seacoast, mines in the mountains, steel factories and several small chemical plants, transport and railroad infrastructure (including bridges and tunnels) and the electric grid.

In terms of its preparation for EU membership, “Montenegro has indicated that the so-called Seveso II Directive, i.e. Directive 96/82/EC on the control of the major-accident hazards involving dangerous substances as amended by Directive 2003/105/EC, is at a very early stage of transposition. Full alignment to the Seveso II Directive is planned for 2015 by the adoption of a new Law on Environment in 2014, and a number of secondary legislative acts in 2015. The practical implementation of the Seveso II Directive has yet not started” (as of 2013).²³⁴³ The European Commission 2015 report on Montenegro progress concludes, “Preparations in this area are still at an early stage.”²³⁴⁴

Biological disasters

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters considers as “biological disasters: epidemics, epizootics and infectious diseases of people, plants and animals.”²³⁴⁵

²³⁴² Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters, Article 8.

²³⁴³ Screening report Montenegro, Chapter 27 – Environment and climate change, March 2013. Available at http://ec.europa.eu/enlargement/pdf/montenegro/screening_reports/screening_report_montenegro_ch27.pdf (6 December 2015).

²³⁴⁴ Commission Staff Working Document, *Montenegro 2015 Report*. Available at http://www.ecoi.net/file_upload/1226_1447156620_20151110-report-montenegro.pdf.

²³⁴⁵ Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters, Article 8.

1.2 Policy and Governance

Montenegro has completed important initial steps towards building and upgrading its emergency management system. The National Security Strategy (2006) is the overall conceptual document, the Law on Protection and Rescue (2007) is the basic legal act for crisis management and disaster response and the National Strategy for Emergency Situations (2013) is the statement on the civil protection policy. Twelve national plans on protection from fires, floods, extreme weather, earthquakes, accidents, etc., organise the operational work on risk prevention and civil protection. These documents define the responsibilities, rights and obligation of citizens, legal entities, local self-governments, and state administration and establish a set of competent national and local authorities regarded crisis management and disaster response. The Ministry of Interior (MoI) is mandated for risk management, preparedness and response since 2004. The Directorate for Emergency Situations (DES), subordinate to the MoI, has been established in 2004 and a number of subordinated local units are operational.

The accession of Montenegro to the EU Civil Protection Mechanism (the agreement has been signed in 2014) will bring the country more in line with the EU civil protection *acquis* and disaster management policies. The Spatial Plan of Montenegro (2006) and National Strategy of Sustainable Development (2007) are other instruments for risk mitigation management.²³⁴⁶

Currently, civil protection is an evolving function under gradual transition from a civil defence and local based protection and rescue, towards a disaster risk reduction, prevention and management. However, Montenegro has acknowledged that the organisation for crisis management and disaster response is facing a lack of financial resources and insufficient administrative capacity.

1.2.1 Strategy scope and focus

The overwhelming national security document – the National Security Strategy of Montenegro, determines that the country should be ready to respond to variety of threats against national and international security by undertaking three missions:

- *“Prevention and management of vital threats.* All instruments of security policy contribute to the prevention and management of vital threats. That means in particular: helping to relieve natural and man-made disasters in Montenegro and abroad; protecting people, critical national infrastructure and vital facilities; and combating organized crime and terrorism.”²³⁴⁷
- *“Crisis management for the purpose of promoting peace.* Montenegro benefits directly from a stable strategic development and therefore it has every reason to contribute to crisis management and promotion of peace.”²³⁴⁸
- *“Defence.* Montenegro maintains its capability to protect and defend its sovereignty, borders, territory, air and sea space, and its population against the threat and use of force of strategic magnitude.”²³⁴⁹

The Strategy of National Security rules out that, “helping to relieve natural and man-made disasters in Montenegro and abroad; protecting people, critical national infrastructure and vital facilities” in emergency situations caused by natural disasters, ecological, technical-technological (manmade),

²³⁴⁶ UNDP, Montenegro, available at <http://www.me.undp.org/content/montenegro/en/home.html>.

²³⁴⁷ Strategy of National Security of Montenegro.

²³⁴⁸ Ibid.

²³⁴⁹ Ibid.

chemical, biological, nuclear and radiological disasters, epiDESics, as well as consequences of terrorism and other hazards is between the core national security missions. The scope of disaster management strategy and policy of Montenegro include natural and man-made disasters at national, local, business and private levels. As the capacities of municipalities are relatively limited, the focal point of all preparations is at the Government and the governmental agencies.

At the documental level (National Security Strategy, National Strategy for Emergency Situations and Law on Protection and Rescue), Montenegro applies an integrated approach to disaster management that includes preventive and operational plans and operations.

In 2014, Montenegro launched a National Platform for Disaster Risk Reduction, which is seen as a key step towards implementing the Hyogo Framework for Action. According to UNISDR, “The National Platform will allow for a coordinated approach in building resilience to disasters and focus on multi-hazard risk assessments and the development of a disaster risk management strategy. It will address ongoing vulnerabilities faced by the country, such as earthquakes, floods and forest fires.”²³⁵⁰

1.2.2 Monitoring and analytical support to policy making; R&D

Disaster data is poorly integrated in Montenegro. Because of relatively short history as an independent sovereign state, much data are still merged with data from Serbia and former Yugoslavia. Institutionally, a DES division – Department for Risk Assessment, is responsible for the repository and management of the national database on risks.

The National Strategy for Emergency Situations determines the following set of monitoring and evaluation requirements:

- “Creation of new and improvement of existing technical capacity for reliable continuous monitoring of all natural phenomena and technological processes, as well as biological hazards, which can result in disasters such as seismological, hydrological and meteorological phenomena, as well as radiological, environmental and health conditions and parameters;
- Equip existing laboratories and establishment of new laboratories necessary for an efficient detection technology and radiological accidents, in order to effectively prevent and reduce accidents,
- Develop modern integrated information systems (GIS) for automated monitoring of all important processes as the basis for system management in emergency situations;
- Periodically re-evaluate all types of important hazards in Montenegro, in order to provide valid data for reliable preventive action and emergency management;
- Provision of the institutions engaged in monitoring natural phenomena and technological accidents with relevant equipment and training.”²³⁵¹

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters stipulates that threat assessments should constantly stay up-to-date. Therefore, hazards are subject to compulsory analysis at least once a year.²³⁵² To enable

²³⁵⁰ Montenegro launches National Platform for DRR, The United Nations Office for Disaster Risk Management, available at <http://www.unisdr.org/archive/41405>.

²³⁵¹ Exert from National Strategy for Emergency Situations, translated from “V.3. MONITORING I EVALUACIJA HAZARDA.”

²³⁵² Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters Article 16.

the harmonisation of contents between different levels, the Ministry of Interior submits their reports to municipalities, and municipalities – to concrete business entities. The assessments are stored in printed and electronic versions by the Ministry of Interior, self-governing administrations and legal subjects.²³⁵³

However, it seems that the Rulebook's methodology is not widely acknowledged or practiced, particularly at municipal level, notably because of limited capacities. According to an international study (EU-UNDP, 2011), the Montenegro Red Cross, for example, does not use the existing risk identification methodology either, and receives risk information only in emergency cases rather than on a regular basis.

The hydrological, meteorological, oceanographic, air and water quality data, collected by the Institute of Hydro-meteorology and Seismology of Montenegro through its networks, is stored in the digital Oracle database.²³⁵⁴ The IHMS maintains two types of databases – meteorological and environmental. There is a linkage established by the IHMS with those systems and sensors that measure various radiological, weather, seismologic, air and water quality parameters. The IHMS does not collect or keep any separate hazards statistics, but statistics for high wind, heavy precipitation and extreme temperatures can be produced for each synoptic observation station.

Local community units collect data on the impact of hazards on the population: police units report on the impact of landslides and rockslides on transport.

An international study (EU-UNDP, 2011) concludes that, “[d]ata is scattered amongst various players and no formal mechanism has been developed to store or access it. There is no central depository of hazard-related data, no data storage bank to facilitate data collection and dissemination. Although DRR-related data can be accessed informally on DESand, many stakeholders are unaware of its mere existence because of its unsystematic collection and updating. Beyond hazard-related data, vulnerability and capacity maps are not existent. Information sharing needs to be improved and systematised.”²³⁵⁵

A UNDP Disaster Risk Reduction Capacity Assessment Report For Montenegro (UNDP, 2011) concludes, “The Ministry of Environment conducts risk monitoring but issues limited early warning messages. The ministry has developed predictive hydrological models and is considering the development of similar models for other risks. Existing risks are reflected in the ministry's development plans through policy documents – however, it is not clear how this information is used in the development of programmes of other governmental institutions. In case of forest fires, there is no monitoring and prevention mechanism in place, even in protected areas.”²³⁵⁶

Seismological Observatory in Montenegro is responsible for the monitoring of seismic hazards – probably the best-monitored hazard in the country. Other hazards are monitored to a lesser extend or not at all.

The Institute of Hydro-meteorology and Seismology of Montenegro (IHMS), by using its network of monitoring stations (10 automatic stations, 20 climatological stations, 60 precipitation stations and 51 hydrological stations, out of which 23 are automatic) provides data on a regular basis to the DES and other government organisations. According to an UNDP study (UNDP, 2011), the institute does

²³⁵³ Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters Article 17.

²³⁵⁴ From the IHMS web-site <http://www.meteo.co.me/>. The Institute's analyses on averages, variability and extremes are available on their website.

²³⁵⁵ EU, UNDP and WMO, *IPA Beneficiary Country Needs Assessment Montenegro*, 2011, p. 17.

²³⁵⁶ UNDP, *Disaster Risk Reduction Capacity Assessment Report For Montenegro*, p. 16.

not have a specific methodology for risk identification when monitoring floods, droughts and fires. The IHMS has counted on the support of the World Meteorological Organisation (WMO) for risk assessment and monitoring. The study also concludes that, “...lack of funding and human capacity is a concern for the smooth functioning of the institute.”²³⁵⁷

Montenegro has joined the ARGOS consortium²³⁵⁸ to enable better identification and monitoring of chemical, biological, radiological and nuclear threats.

1.2.3 Policy for Prevention

Prevention has been considered and addressed by the Montenegrin authorities only since 2010. Montenegro is slowly getting aware of the possibilities existing regarding this issue, for instance through earthquake-resistant design, spatial-city planning and preparation against earthquakes to alleviate seismic risk.

The National Strategy for Emergency Situations prescribes the following set of prevention priorities:

- “To build facilities and installations in accordance with the local risk of emergencies and with respect to technical norms;
- To certify the microbiological laboratories and establish a permanent supervision of their work;
- To intensively implement monitoring of transportation of dangerous goods;
- To strengthen the regimes of arms, military equipment and dual-use goods control;
- To develop appropriate plans for protection against all hazards; the plans shall be concrete and focus on prevention the occurrence of harmful effects from emergencies as well as on rehabilitation in case they happened;
- To conduct of a periodical (at least once a year) review of the readiness of the responsible personnel and mobile teams for all types of assumed disaster;
- To establish reserves of necessary materials for all anticipated disasters;
- To establish preventive measures to protect sources and supply installations of drinking water to the large urban areas;
- To develop national contingency plans in case of emergencies;
- To coordinate interventions in cases of accidents between institutions and with the local authorities.”²³⁵⁹

At the community level, municipalities have the responsibility to build their own capacities. Thus, their development processes are mostly ad hoc and depend on their respective budgets.²³⁶⁰ In flood-prone areas like Berane, Ulcinj or Rozalje, local municipalities are building embankments as preventive measures, but processes like these vary according to municipalities.

²³⁵⁷ Ibid, p.15.

²³⁵⁸ ARGOS is a Decision Support System for crisis and emergency management for incidents with chemical, biological, radiological, and nuclear releases. The current member countries of the ARGOS Consortium are (November 2014): Australia, Brazil, Bosnia-Herzegovina, Canada, Denmark, Estonia, Ireland, Lithuania, Macedonia, Montenegro, Norway, Poland, Serbia, and Sweden: <http://argosconsortium.org/members.html>.

²³⁵⁹ Unofficial translation from Chapter “V.4. PREVENTIVNE MJERE,” p. 149.

²³⁶⁰ Law on Protection and Rescue, Article 41.

Risk mitigation measures are integrated to a good extent into the spatial development plan, even though vulnerability due to different hazards has not been worked out.²³⁶¹ The Vienna Declaration (2004) has recognised the construction of illegal settlements in the countries of South Eastern Europe as an evident problem.²³⁶² As a signatory state, Montenegro is now committed to undertake measures necessary for defining causes of illegal construction and initiating and implementing reforms in the field of sustainable urban development and housing policy through appropriate inspection and supervision. Illegal construction in some local self-governments has been significantly reduced, e.g. in the capital Podgorica. However, lack of professional personnel for execution of the works related to inspection supervision²³⁶³ and disrespect of regulations by legal entities and natural persons hamper the state's efforts to suppress illegal construction and to improve existing legislation in the area of spatial planning.²³⁶⁴ As one of the measures to reduce seismic risk, the municipalities have to define procedures for seismic risk to be assessed and considered when elaborating local planning documents and urban development.

Environmental assessments, taking into account seismic risk and climate change, are compulsory for the construction of critical infrastructures such as bridges, schools and hospitals. However, whether the responsibility of approving construction lies at the municipal or central level is not always clear. (EU-UNDP, 2011)

1.2.4 Policy for Preparedness

The National Strategy for Emergency Situations (2005) provides a basis to respond quickly to technological and natural disasters. The policy for preparedness envisages a whole-of-government approach to emergency assistance and rescue through engagement of experienced representatives from all institutions, which by their function are involved in the process of monitoring, reporting, prevention, rescue and relief, into the national coordinating body of Montenegro. Along this, experts and trained workers in all the relevant institutions for disaster management, as well as trained volunteers, must have a certain schedule to organise their activities and ensure their efficient activating and engaging in disaster response operations.²³⁶⁵

The Rulebook on Methodology for the Development of Protection and Rescue Plans²³⁶⁶ delivers a more systematic guidance on the policy for preparedness. The Rulebook establishes how contingency plans for a) prevention, b) crisis management and c) early recovery should be developed at the national level, a local level and within specific business entities. To comprehensively address the three disaster management phases, the following aspects should be reflected by the policy and planning for preparedness: spatial planning, regulation of river flows, protection from fire, building of local early warning systems, preparation of water sanitation and potable water sources, and implementation of a variety health measures.

²³⁶¹ Source: <http://drace-project.org/index.php/map/montenegro>.

²³⁶² Vienna declaration is available at http://www.stabilitypact.org/housing/f%20-%20050415_Vienna%20Declaration.pdf.

²³⁶³ Spatial Plan Status Report p.69.

²³⁶⁴ Spatial Planning Support Project Revised Work Plan September 2010 – August 2011.

²³⁶⁵ Unofficial translation from Chapter "V. 6. PRUŽANJE POMOĆI I SPAŠAVANJE," p. 150.

²³⁶⁶ Official Gazette of Montenegro 13/07, Rulebook on methodology for the development of protection and rescue plans, <http://www.questionnaire.gov.me/Annexes/Annex082.pdf>.

Plans should also define which body is accountable for taking decisions, transmitting information to the 112 Centre, executing and managing mobilisation, making reports, and where funding and personal and material resources are to be found.

It requires also a layered map to be created at the national level (1:200 000), identifying population density, threatened zones, and border crossings where international aid and rescuers could potentially arrive. At the local level, 1: 25 000 maps should help locate temporary settlement areas, access roads for intervention, evacuation routes, zones where to place refugees, medical facilities. The similar map should be created for companies (places for the administration of first aid, shelters).

1.2.5 Policy for Response

The Law on Protection and Rescue (Art. 11) regulates the policy for response in the following way:

Activities and practices that are mandatory conducted in the time of risk, are especially:

- 1) *Activation of protection and rescue units;*
- 2) *Implementation of evacuation and care and support for the population and material goods;*
- 3) *Preventing the spread of risk and risk consequences and*
- 4) *Coordinating the activities of participants in protection and rescue.*²³⁶⁷

At the national level, the Emergency Operations Centre situated within the Emergency Management Coordination Team (EMCT) operates the standby troops. At the local level, Municipal Teams for the Management of Emergency Situations include members of the Montenegro Red Cross (MRC), who are volunteers, and a representative of the DES (professional rescuers), and are lead by the mayors.²³⁶⁸

Protection and rescue operations are conducted by civil protection units of the government, fire fighting units, local government units, specialised protection units, business organisations, airborne (helicopter) and terrestrial fire units, trained volunteers, and employees of Ministry of Interior, which have passed the state licence exam for working on protection and rescue affairs. More than 4000 people, not including the Army and Police units, can be counted on to respond to any emergency.²³⁶⁹ From the 10,000 Red Cross volunteers, 1,000 are operational on a daily basis.

The DES can additionally activate its local branches, local MRC units, as well as the local Police Units and its operational helicopter unit. When needed, the MoD can deploy steady Civil Protection Units to empower the resources and capacities of the DES and municipalities.

The quality of protection services greatly depends on the municipalities' financial capacity. A UNDP study cites the response of the municipality of Berane to the 2010 flash floods: 700 persons could be accommodated in sport halls and provided „with food, mattresses, blankets, cooking sets, hygiene items, potable water, baby formula and diapers“. However, according to the report, this has been greatly due to external funding provided by the UNHCR, Caritas Luxemburg and UNDP (the MRC also provided some donations), and the funds were not sufficient to cover urgent repair of houses.²³⁷⁰

²³⁶⁷ Law on Protection and Rescue, Article 11. Available at www.ifrc.org/docs/IDRL/Laws/Montenegro_Law%20on%20Protection%20and%20Rescue.pdf.

²³⁶⁸ Law on Protection and Rescue Official Gazette of Montenegro 13/07, 2007.

²³⁶⁹ The numbers are provided by the Directorate for Emergency Situations.

²³⁷⁰ UNDP, 2010, Montenegro flash floods early recovery support for riverside Berane.

1.2.6 Policy for Relief and Recovery

The terms “relief” and “recovery” have not been used in the relevant legislation and documentation of Montenegro. However, the Law on Protection and Rescue (Art. 12) prescribes the policy of “elimination of risk consequences” in the following format:

The activities and practices that mandatory conducted for the elimination of risk consequences are, especially:

- 1) Assessment of the damage and consequences;*
- 2) Remediation of risk affected areas;*
- 3) Ensuring and providing necessary assistance to vulnerable and affected population;*
- 4) Implementation of health and hygienic and epiDESiological measures;*
- 5) Implementation of appropriate protection of animals and plants and animal and plant products and*
- 6) Organising supply with resources for assistance and provision of utility services for a fast normalisation of life.²³⁷¹*

There is no available information on the mechanism of post-disaster assessment and delivery of compensations at the national level. It seems that the Government decides on case-by-case basis all consequence management issues.

According to the Law on Protection and Rescue (Art. 41), “The municipality shall, in exercising rights and obligations in the protection and rescue field: ... decide on the amount of budgetary funds for damages caused by risk.” Based on this regulation, the local committees conduct damage assessments at the municipality level. A special budget for disaster response is allocated to municipalities and managed by the mayors. However, citizens are not compensated in full. The municipality authorities decide the amount to be compensated, but usually it does not go beyond 50 per cent of the total cost of the damage (regarding construction, this practice covers both legal and illegal construction). As a result, richer municipalities may apply higher standards for damage and loss compensation. In case the available budget in the municipality is not sufficient to compensate the citizens, the central level provides a mechanism to access funds for this purpose. According to Art. 76 of the Law on Protection and Rescue, “Cost of accommodation of evacuated population shall be provided in the budget of Montenegro.”

EU-UN sponsored study concludes that early recovery issues in Montenegro “... are only addressed as much as the budget allows it, which is very superficially, and not specifically incorporated into any strategies, legal acts, plans or institutional arrangements. Financial means are by far not sufficient to effectively allow communities to quickly recover in times of emergencies.” (EU-UNDP, 2011)

1.3 Financing

According to the Law on Protection and Rescue, there are the following sources of disaster management funding:

Protection and rescue shall be funded from:

²³⁷¹ Law on Protection and Rescue, Article 12. Available at www.ifrc.org/docs/IDRL/Laws/Montenegro_Law%20on%20Protection%20and%20Rescue.pdf.

- *The budget of Montenegro;*
- *Municipal budget;*
- *Voluntary contributions;*
- *International assistance;*
- *Funds of business organisations, other legal persons and entrepreneurs;*
- *Other sources.*²³⁷²

According to the Government report (MoI, 2014), the Budget of the Ministry of Interior for 2013, for the purposes of the Directorate of Emergency Situations is at the amount of 2,552,337 euros. The structure of the funds spent by positions is:

- "Gross wages and employer contributions -1,474,081 euros;
- Other personal payments - 280,567 euros;
- Expenses for materials – 117,045 euros;
- Expenses for services – 29,473 euros;
- Expenses for maintenance - 376,623.83 euros;
- Annuity – 90,000 euros;
- For other tasks – 184,545 euros."²³⁷³

The structure of the budget clearly illustrates that funding is limited to salaries mostly. For further development of the most important components of the protection and rescue system such as education and training of the operational units, the purchase of new equipment and machines, etc., no sufficient funds are committed.

1.3.1 Investing in preparedness

Neither that Law on Protection and Rescue, nor any other document prescribes how the budget should be dedicated to risk reduction and crisis response. However, despite that the DES has been working on DRR since 2010, at central level there is no budget to develop disaster risk reduction activities, as the existing budget is allocated to covering salaries. Furthermore, within other ministries, annual planning needs do not include specific programs oriented towards risk reduction so budgets cannot be allocated for them.

At the municipal level, spending on developing or implementing DRR measures is on *ad hoc* basis.

The IHMS is severely under-financed for essential parts, concerning DRR, and it does not have resources to operate a 24/7 analysing and forecasting system.

According to the World Meteorological Organisation study (WMO, 2011), it can be expected that, if ministries prepare adequate DRR programmes or projects, there could be possibility of funding from EC funds. UNDP has also channelled activities through the Bureau of Crisis Prevention and Recovery, which could be directed at capacity development and improving risk assessment practices.

²³⁷² Ibid, Article 16.

²³⁷³ The Government of Montenegro, *Izveštaj o Stanju Sistema Zaštite i Spašavanja U crnoj gori u 2013 Godini*, p.30. Available at www.gov.me/ResourceManager/FileDownload.aspx?rId=164029&rType=2.

1.3.2 Investing in consequence management

Montenegro does not regulate the maximum amount of emergency assistance aid per person or legal entity in the case of large disasters. However, the emergency assistance typically covers only a small fraction of the total damages, as the overall amount of aid is mainly limited to government budget reserves for emergencies. The relief aid, provided by the Government of Montenegro, is up to 10 per cent of physical damages (e.g. in Slovenia, the compensation is 40-60 per cent).

Municipalities in Montenegro dedicate to disaster management between one and three per cent of their budgets. Mayors manage this funds according recommendations from established committees. Presumption is that, if the disaster is significant and damages are above the local budgets capacity, than the Government shall provide additional funding for reconstruction and compensation of people.

Concerned the specific requirements for pricing, reserving or reporting disaster risks underwritten by local insurers, Montenegro companies are allowed to form equalisation or other reserves, but only after a formal approval by the Insurance Regulator.

In terms of personal and family insurance culture, most of the population do not have (or are not aware of the need for) insurance against natural disasters – it barely exists in Montenegro. It is the responsibility of the citizens to activate the insurance, but since it is not mandatory by law, the population and companies don't see the need for it. In practice, citizens expect the State to somehow compensate them. Furthermore, it is not clear if the insurance system in the country is capable of issuing insurance products covering natural disasters, as there is no proper risk assessment that could be used by the insurance companies for costing their products.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

The Law on Protection and Rescue requires the Government to “...submit a report to the Parliament of Montenegro and the President of Montenegro on the type, cause and scope of the resulting state of emergency, the measures and activities taken to protect and rescue and estimates regarding the possible future developments.” (Art. 36)

However, the policy on civil protection, obviously, is a part of the Ministry of Interior's internal planning, implementation and accountability process. There are not any publicly available plans or annual reports neither from the Ministry of Interior nor the Directorate for Emergency Situations.

A collection of data and assessment has not been established yet in a formal manner that makes post-disaster policy review unavailable.

Recently, the post-disaster recovery is not introduced into disaster preparedness planning.

UNDP-Montenegro has organised 'Post-Disaster Needs Assessment following the November – December 2010 Flood Disaster in Montenegro' observing damages to households and livelihoods in Berane.

1.4.2 Departmental Lessons Learned systems

No data was found on departmental lessons learned systems.

1.4.3 Centralised (national) Lessons Learned system

The Department for Risk Assessment within the DES is responsible for managing a national risk database,²³⁷⁴ but no formal mechanism for the collection, storage and accession of information exists at national level. There is little retrospective country-specific disaster data available and data collection is generally undergone ad hoc at different levels, mostly by local committees, and by organisations pertaining to hazards, which impacted them. There is an extensive belief expressed by the stakeholders that a standardised methodology for impact assessment is needed.

The DES has an inventory of information about some past floods (local commissions made damage assessment reports in the aftermath of the 2009/2010 floods, some information is available concerning the 2000 droughts), but the data is neither organised nor harmonised. The same holds true for data from the Ministry of Agriculture, which prepares surveys on damages caused by floods at municipal level when farmers claim for indemnities. The only comprehensive post-disaster assessment was developed for building stocks after the 1979 earthquakes in order to serve as a basis for a study assessing the vulnerability to seismic hazards. (EU-UNDP, 2011) However, it is difficult this achievement to be qualified as a lessons learning system.

1.4.4 International exchange for Lessons Learned

Obviously, the authorities in Montenegro are aware with the fact that the country has not sufficient resources and capabilities to protect, rescue and relief in a case of major natural or technological disasters. The National Strategy for Emergency Situations reflects this understanding, requiring to establish communication with relevant international institutions, which in the case of a major disaster could render appropriate assistance, such as the International Red Cross, WHO, FAO, UNEP, UNCOPS, UNIDO, IAEA, and others. The Strategy stipulates the importance of regional crisis management cooperation in SEE in order to gain new experiences and improving response capabilities.

1.4.5 Regular policy reviews

The Law on Protection and Rescue requires the Government to “... submit an annual activity report to the competent working body of the Parliament of Montenegro.” (Art. 36)

1.5 Resilience

The Montenegrin authorities do not implement the concept of resilience. There are neither legal, nor policy regulations on the use of sustainability standards by public institution or private business in disaster management and civil protection context.

²³⁷⁴ The Structure, Role and Mandate of Civil Protection in DRR for SEE, 2008.

1.6 Information sharing and data protection

Information collection and sharing are seen as one of the most poorly defined elements in the Montenegro protection and rescue system. The UNDP conclusion (UNDP, 2011) that “... it is still to be decided who has the responsibility to treat data and process information and to make risk assessments”²³⁷⁵ is also shared by other observers. The EU sponsored study emphasises that,

*... [t]here is currently no evidence of DRR information management methodology. Data is scattered amongst various players and no formal mechanism has been developed to store or access it. There is no central depository of hazard-related data, no data storage bank to facilitate data collection and dissemination. Although DRR-related data can be accessed informally on DESand, many stakeholders are unaware of its mere existence because of its unsystematic collection and updating. Beyond hazard-related data, vulnerability and capacity maps are not existent. Information sharing needs to be improved and systematized.*²³⁷⁶

²³⁷⁵ UNDP, *Disaster Risk Reduction Capacity Assessment Report For Montenegro*, p.17.

²³⁷⁶ EU, *IPA Beneficiary Country Needs Assessment Montenegro*, p.17.

2 Legislation

Following the dissolution of the Socialist Federal Republic of Yugoslavia (SFRY) in 1992, Montenegro federated with Serbia, first within the Federal Republic of Yugoslavia and subsequently, after 2003, in a union of Serbia and Montenegro. Since 2003, and following the declaration of its independence on 3 June 2006, the Parliament of Montenegro approved a number of laws and regulations with the aim of modernising the old jurisdiction of the SFRY, as well as introducing new state' competences. In result, the disaster management and civil protection legislation in force is still based on a large number of laws, regulations and decrees approved and implemented by the former Parliament of SFRY. However, protection and rescue are a critical issue for the country, since historically Montenegro has suffered the dramatic effects of natural and technological disasters that have caused huge damage and suffering.

2.1 Crisis (emergency, disaster) management concept

The National Strategy for Emergency Situations is one of the strategic documents concerning national security with. Its goal is to secure that the state has established and maintains a relevant to the country's natural and technological hazards and threats. The strategy has originated from the increased awareness of the needs of the citizens of Montenegro for a comprehensive and efficient treatment of all forms of emergency in the country.

The strategy determines the policy of prevention, mitigation and preparedness at national, local, business and individual levels. The document has a serious volume (pages 165) as it analyses all hazards, risks and expected consequences, frames the civil protection system and explains the integrated procedures for protection and rescue. A National Action Plan is developed to implement the strategy.

The National Strategy for Emergency Situations can be summarised in the following priority commitments:

- Normative regulation of salvage and preventive action in order to protect against natural disasters, technical and technological accidents and biological hazards;
- Establishment of national system of disaster management through the Directorate for Emergency Situations and Civil Security as an organisational unit of the Ministry of Internal Affairs of Montenegro, which will functionally integrate all relevant institutions involved in the process of monitoring of natural and technological hazards, protection and rescue;
- Initiate social processes to long-term development of scientific research in the field of phenomenology of natural disasters and their impact on society;
- Strengthen the overall preparedness of the community and awareness of the importance and need for organised and effective social action in the prevention and treatment of adverse effects and emergencies at regional and local level;
- Improve the system of continuous monitoring of all significant natural, technological and biological hazards, in order to provide reliable and efficient detection and notification;

- Provide relevant and sufficient equipment and training of specialised institutions and individuals for protection and rescue in emergency;
- Take all necessary measures to prevent the occurrence and reduce harmful effects of disasters;
- Create a formal basis and establish international cooperation with other organisations for protection and rescue in the region in order to create conditions for regional rescue and relief in cases of large-scale emergencies.²³⁷⁷
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2.2 General crisis (emergency, disaster) management law

Specific laws relevant to civil protection have been approved as follows:

- The Law on Protection and Rescue (2007);
- The Law on Hydro-meteorological Services (2010);
- The Law on Hydrographic Services (2010).
- Act on Flammable Liquids and Gases (2010);
- Law on Transport of Dangerous Goods (2014);
- The Law on Explosive Substances (2008).

Among other laws with references to disaster management and civil protection (usually indirect) are the following:

- The Environment Law (1996);
- The Law on Waters of the Republic of Montenegro (2007);
- The Law on Protection of Air against Pollution (1980).

The Law on Protection and Rescue provides the legal background for response to all disasters caused by natural and man-made hazards. In order to protect effectively the population and the material heritage against possible disasters and preventing the spreading of risk, the Law prescribes to conduct activities related to collection and processing of data on potential risks, establish information and early warning systems.

The Law mandates that these preventive activities include assessment of vulnerabilities²³⁷⁸ as well as the development of plans for protection and rescue, spatial development and building buildings, the establishment of a protection and rescue system and provision of material resources, personnel and other resources necessary to carry out the planned activities. The Law enables the overall adequate functioning and gives to municipalities' competencies to act in cases of disasters.

The Law stipulates that the Directorate for Emergency Situations coordinates the development of National Plans of Protection and Rescue. The National Plan for Protection of Extreme Meteorological Occurrences and the National Plan for Flood Protection derive from the National Plan.

²³⁷⁷ Unofficial translation of V. STRATEGIJA ZAŠTITE OD KATASTROFA, p.145.

²³⁷⁸ Defined as "a qualitative and quantitative analysis of data on the possible hazards of the occurrence of natural disasters" "with predictions of their possible future course and consequences, the proposal of the level of protection against risk and proposal of preventive and other measures for protection and rescue."

2.3 Emergency rule

The Law on Protection and Rescue introduces the emergency rule as “state of emergency.” It is stipulated, that the Parliament of Montenegro, based on Government proposal, shall proclaim state of emergency. Such a proposal should be made at the occurrence of a hazardous event, or after it occurred, if the hazard could not have been foreseen. The emergency rule might be proclaimed for the territory of Montenegro if there is an imminent hazard that would affect or has already affected at least two municipalities.

State of emergency shall be introduced for a municipality if there is an imminent hazard that would affect or has already affected part or the entire municipality. In a case of introduction of an emergency rule, the key role is of the Ministry of Interior. It is responsible to:

- Deliver the official communications about the hazard;
- Inform about the introduction of state of emergency and its scope, activities and measures to protect and rescue to be taken;
- Coordinate and command the task forces, implementation of mobilisation, timely notification and control of implementation of required measures and activities to protect and rescue, with the exception of search and rescue at sea;
- Keep records of task forces, resources and measures taken to protect and rescue in states of emergency.

However, the Law on Protection and Rescue and the other normative acts do not regulate what human rights and civil freedoms could be limited or dismantled by introducing “state of emergency” and for how long. Obviously, the presumption is that the parliament will be responsible enough to introduce only the necessary restrictions, on a concrete territory for as shorter as possible period.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Directorate for Emergency Situations on Threat Assessment

Pursuant to Article 34 of the Law on Protection and Rescue, the Ministry of Interior has adopted two documents: the Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters and the Rulebook on Methodology for the Development of Protection and Rescue Plans.

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters delegates responsibility:

- To the Directorate for Emergency Situations and other ministries for risk assessment on the territory of Montenegro;
- To the local governments in coordination with the Directorate for Emergency Situations for the vulnerability assessment of municipalities and
- To companies with more than ten employees, again in coordination with the Directorate for the vulnerability assessment of companies activities and infrastructure.

According to the rulebook, the threat assessment shall include:

- “An assessment of hazards or causes that may lead to the occurrence of disasters and the consequences that may arise for people, material and cultural goods and the environment;
- Determining the appropriate organisation of protection and rescue in order to prevent the occurrence of disasters or for purposes of rescue of people; and
- An assessment of needs and possibilities in the provision of human and material potentials necessary for achieving the estimated protection and rescue organisation.”²³⁷⁹

The military

There is no legal basis on the role of the army in disaster management and disaster response. There are, however, a National Security Strategy and a National Defence Strategy. There are no by-laws and standard operational procedures (SOPs) on the role of the army on disaster management. The Ministry of Defence (MoD) has not been involved in the development of any of the legal documents related to disasters. This, however, does not exclude the cooperation between the MoD and the DES, which have been working together during the floods in December 2010. The MoD is considering the development of internal SOPs for disaster response.

Construction

The Law on Construction establishes construction practice and construction codes. However, in reality new codes and practices are better applied to new constructions and to a lesser extent to older and illegal constructions. Although this particular law has a provision for disaster situations, most of the sectorial legislative documents do not mention DRR.

Water

The Law on Water defines the obligation of preparation of a General Plan for Protection from the Harmful Effects of Water (The current plan covers the period 2010-2016). It especially contains works and measures, which are undertaken preventively and in the period of high waters for protection from floods and erosion; a method of institutional organisation of defence; duties and responsibilities of the manager for protection; a method for monitoring and recording data; a method for early warning.²³⁸⁰

The law foresees the preparation of an annual Operational Plan for the Protection from the Harmful Effects of Floods. At national level, it should be prepared by the Water Department and the Ministry of Rural development and Agriculture (MoRA), while at the local level it should be prepared by competent local authority, with the approval of the MoRA's Water Department. The Operational Plans determine the names of managers of protection against the harmful effects of water, headquarters, bodies and names of companies and other entities that conduct legal protection against the harmful effects of water and means for operational implementation of protection.

Hydro-meteorological service

The laws on “hydrometeorological services” and on “hydrographical services” (2010) define the tasks of the Institute of Hydrometeorological and Seismology of Montenegro (IHMS). It states that the IHMS has duty to:

²³⁷⁹ Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters, Article 3.

²³⁸⁰ The Government of Montenegro, *Општи План Заштите од Штетног Дејства Вода, за Воде од Значаја за Црну Гору, за Период од 2010. до 2016. Године*. Available at <http://faolex.fao.org/docs/pdf/mne139429.pdf>.

- “Produce non-scheduled meteorological and hydrological information and warnings in situation before atmospheric and hydrosphere emergency situation;
- Organise emergency observation and measurement of the hydrological stations profiles
- Submit emergency information;
- Monitor weather and waters;
- Collect and analyse data;
- Prepare forecast;
- Inform and alert responsible agencies.”²³⁸¹

Air

There is also a Law on Environment and Air Quality. In 2007, the Government has adopted the National Strategy of Sustainable Development, which recognises climate changes and protection of ozone layer as a priority.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

The Law on Local Self-Government states that the local authorities are the first line of responding to protect and rescue the population from natural and manmade disaster. In the event of a disaster, an emergency management team led by the mayor (which includes a representative of the DES in a deputy position) is created, and it comprises all relevant authorities and stakeholders (including the Red Cross).

The protection services are managed locally and their equipment and training is provided with municipal funds. International studies report that few richer municipalities have an adequate mechanism to respond to emergencies, while most of them have very scarce means.

In case the municipality does not have enough means to respond to the disaster, it can request the Ministry of Interior for support. The DES, based in the Ministry of Interior, has local branches, however its capacities at the local level are modest.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The Law on Protection and Rescue determines that “Civil protection shall be part of a single protection and rescue system in states of emergency. Civil protection shall consist of civil protection units, protective and rescue equipment, buildings and devices.” (Art. 56)

Citizens that reached 18 years of age shall be entities under obligation to participate in Civil Protection until 63 years of age (men) or 55 years (women). At the same time, all men and women

²³⁸¹ WMO, “Chapter Six: Meteorological, Hydrological and Climate Services to Support Disaster Risk Reduction and Early Warning Systems in Montenegro” in *Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs*, p. 141. Available at www.wmo.int/pages/prog/drr/projects/SEE/documents/SEEPPhase%20I%20-%20MontenegroReport.pdf.

older than 15 years may voluntarily participate in civil protection, with rights and duties of civil protection members. (Art. 59)

Under these circumstances, the citizens who voluntarily perform protection and rescue activities shall be organised in “specialised units.” They have to be registered, certified and managed (during emergencies) by the Ministry of Interior. In case of engagement of crisis response operations, the volunteers have to be compensated by the Ministry.

The Law determines that the Red Cross of Montenegro, as a volunteer organisation, shall especially do the following:

- “Perform search service tasks in view of collection and recording of data on evacuated persons, refugees, displaced and missing persons;
- Participate in giving shelter and accommodation of evacuated population, refugees and displaced persons, provision of assistance in the implementation of other measures that may contribute to the care and support for afflicted and vulnerable population, refugees and displaced persons;
- Run, organise, conduct or participate in solidarity actions for assisting vulnerable persons;
- Organise and train teams for activities in the field of social security, hygienic and epidemiological protection, care of the wounded and sick, rescuing on water and mountains and psychosocial support to the population and
- Advertise and organise voluntary blood donation actions, in cooperation with medical institutions for blood transfusion, keep records of voluntary blood donors, establish conditions for granting awards to voluntary blood donors and grant awards.”²³⁸²

The Law also provide opportunity for business organisations, entrepreneurs, and other legal and physical persons to organise voluntary units. (Art. 67) These units shall be completely provided with resources and training by the establishment bodies, which are also obliged to submit annual and monthly activity reports to the Ministry of Interior and the mayor of the municipality.

2.7 Legal regulations for international engagements of first responders and crisis managers

The Directorate for Emergency Situations has signed on behalf of the country a number of bilateral partnership agreements, mostly related to cooperation in emergency response, with countries such as Bosnia and Herzegovina, Slovenia, Croatia, Macedonia, Greece, Serbia and the Russian Federation. Montenegro also participates in regional and international frameworks in the area of disaster management such as Disaster Preparedness and Prevention Initiative, Programme for the Prevention Preparedness and Response to Natural and Man-Made Disasters (PPRD South), Civil-Military Emergency Preparedness, and the Organisation for the Prohibition of Chemical Weapons, among others.

However, the Law on Protection and Rescue does not provide any special regulations concerned the engagement of foreign first responders in emergencies on the Montenegrin territory and for sending Montenegro rescuers abroad. It only states that the Ministry of Interior shall

²³⁸² Law on Protection and Rescue, Article 66.

“...cooperate with the competent authorities of other countries and with international organisations and institutions.”²³⁸³

²³⁸³ Ibid, Article 37.

3 Organisation

3.1 Organisational chart

In 2004, the Government of Montenegro has adopted changes and amendments to the regulations on the state administration. Under the terms of the new regulation, the Ministry of Interior and Public Administration has been made responsible for managing risks, managing civil protection and rescuing in emergency situations and managing to relieve of consequences in the extraordinary situations (earthquakes, fires and other natural and technical/technological catastrophes).

The regulation also has established a Directorate for Emergency Situations and Civil Security as a unique body to coordinate Civil Protection in Montenegro. The Directorate has changed the name in 2013 to Directorate for Emergency Situations (DES) and the ministry has been titled Ministry of Interior (Moi).

Ministries and state agencies, engaged in disaster management with different responsibilities and resources, include the Ministry of Interior (namely the DES), Ministry of Defence, Ministry of Health, Ministry of Foreign Affairs and European Integration, Ministry of Transport and Maritime Affairs, MoRA, Ministry of Sustainable Development and Tourism, Army of Montenegro, Police Directorate, Agency for Environment Protection, Institute for Hydrometeorology and Seismology, Centre for Ecotoxicological Researches, Medical Emergency Service, Montenegro red Cross, other.

Within the current legal and organisational framework, there are three levels of disaster protection and rescue: political, administrative and local (municipalities).

A) Political level

The key political leadership, guidance, coordination and control are provided by:

- Emergency Management Coordination Team (The Prime Minister heads the team and all ministers are members);
- The Ministry of Interior (Directorate for Emergency Situations) is the core national administrative authority on protection and rescue from natural and other disasters);
- The Ministry of Sustainable Development and Tourism (Institute of Hydrometeorology and Seismology Service of Montenegro controls the waters, air, sea, and seismic activities).
- Administrative level

The Directorate for Emergency Situations (DES) is the leading national agency responsible for issues related to disaster management, which is well established and recognised by other national and international organisations. According to the National Strategy for Emergency Situations, DES is responsible for:

- Development of strategies, projects, programs and monitoring their implementation;
- Implementation of the process of harmonisation of legislation on civil protection with the EU legal system;

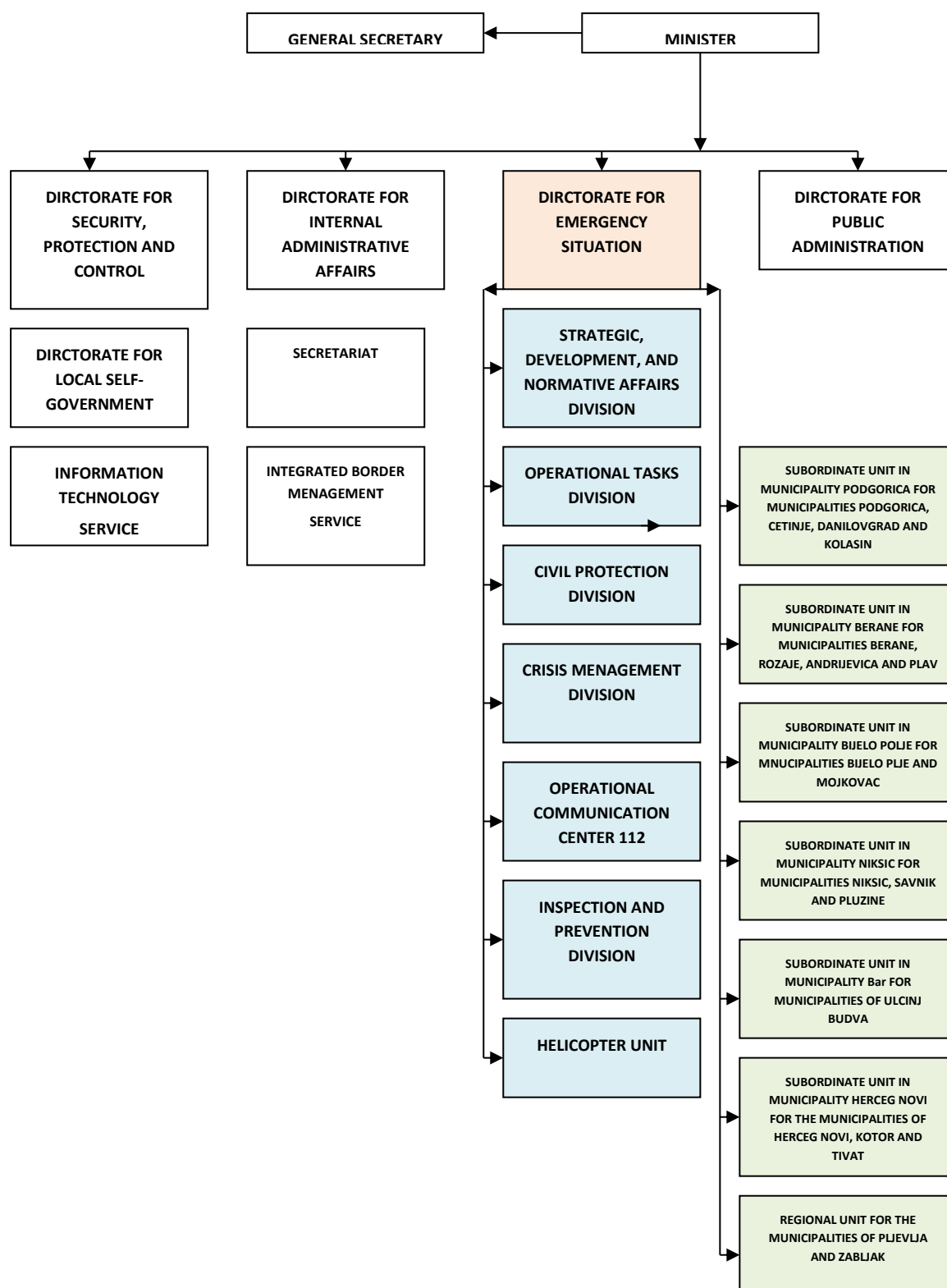


Figure 68. Organisation of the Directorate for Emergency Situations within the Ministry of Interior.²³⁸⁴

²³⁸⁴ The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe. South Eastern Europe Disaster Risk Mitigation and Adaptation Programme, World Bank and the United Nations International Strategy for Disaster Reduction Secretariat (UNISDR), available at http://www.unisdr.org/files/9346_Europe.pdf.

- Drafting of laws and regulations;
- Analysis and monitoring of the situation in the area of protection and rescue;
- Establishing programmes to equip and develop the system of protection and rescue;
- Preparing draft decisions on the provision of material reserves for the protection and rescue;
- Giving directions for the management of the protection and rescue and proposing measures to protect participants and rescue;
- Collecting data on threats, causes and consequences of emergency situations;
- Assisting in eliminating the consequences of emergencies;
- Applying control on the preparedness of emergency operational units;
- Preparing and monitoring the execution of the contract on the use and operation of specialised units;
- Prescribing technical standards of protection and rescue system in accordance with international standards;
- Planning and development of civil protection and alignment of its activities with the operational units of protection and rescue;
- Preparing proposals for decisions on sending overseas operating units for training exercises and humanitarian activities;
- Seeking and accepting help from other countries in the event of emergencies;
- Receive calls and information in emergency situations through a single Operational Communications Centre 112.

DES also has to provide inspection and control work in the areas of:²³⁸⁵

- Protection and rescue, transportation of dangerous goods, manufacturing, transportation, procurement, storage and use of explosive materials, storage, possession, transport, handling and use of flammable liquids and gases;
- Review of technical documentation;
- Transport and transit of arms, military equipment and dual-use goods;
- Technical protection of people, space and facilities;
- Preparation, organisation and implementation of programmes for professional development and training of the operational units members;
- Organising and implementing preventive, operational and remedial measures for the protection and rescue; carrying out rescue activities in the event of emergencies;
- Preparing and informing citizens in the event of emergencies;
- Elimination of unexploded explosive devices;
- Organisation and operation of the unit for extinguishing fires from the air;
- Search and rescue operations from the air;

²³⁸⁵ Unofficial translation from *Nacionalna Strategija za Vanredne Situacije*, p. 112. Available at http://www.mup.gov.me/biblioteka/direktorat_VS/strategije.

- Pilot training, pilot simulator and mandatory technical rehearsal; implementation of the program of cooperation with international and regional organisations, institutions and other entities involved in the protection and rescue;
- Preparation and monitoring of the implementation of international agreements in the field of protection and rescue.

The Directorate²³⁸⁶ for Emergency Situations is divided into five divisions (indicated below from 1 to five), four departments (indicated as 2.1, 2.2, 3.1 and 3.2) and seven territorial units (listed in point 6):

1. Division for Civil Protection and Humanitarian Aid.
2. Division for Prevention:
 - 2.1. Department for Risk Management;
 - 2.2. Section for Management of Hazardous Substances.
3. Crisis Management Division:
 - 3.1. Department for Training and Operations;
 - 3.2. Operational communication centre 112;
4. Helicopter Unit.
5. Inspections and Prevention Division.
6. Regional Emergency Units:
 - 6.1. Podgorica Regional Unit for the Capital City of Podgorica, capital of Cetinje, and Funtana and municipality of Kolasin
 - 6.2. Regional Unit for the municipalities of Niksic Niksic, Šavnik and Plužine
 - 6.3. Branch Office Bijelo Polje for the municipalities of Bijelo Polje and Mojkovac
 - 6.4. Regional Unit for the municipalities of Berane Berane, Rožaje, Andrejevica and blue
 - 6.5. Regional Unit for the municipalities of Pljevlja and Zabljak
 - 6.6. Branch Office Bar in the municipalities of Bar and Ulcinj Budva
 - 6.7. Regional Unit Herceg Novi for the municipalities of Herceg Novi, Kotor and Tivat

Division for Civil Protection and Humanitarian Aid. Its main duties include “development of strategies, projects and programmes in the civil protection domain and monitoring their implementation; providing risk assessment and drafting national plans for protection and rescue; developing and maintaining of civil protection units; providing training and exercises to the members of the civil protection units; monitoring the situation and tendency in the field of civil protection; planning, organising and mobilising units and teams of civil protection; managing, coordinating and equipping units and teams of civil protection; implementing of measures for protection and rescue; monitoring and enforcement of laws and other regulations in the field of protection and rescue; drafting of laws and regulations proposals; participating in the development of standard operating procedures; harmonisation of legislation in the jurisdiction of this Directorate with the EU legal system; cooperation with international and regional organizations, institutions and other entities; providing

²³⁸⁶ For the purposes of this study the rank of Montenegro’s administrative units is presented within the hierarchy of “Directorate” that consists of several “divisions”, each of which includes several “departments”, while they are organised in sectors or sections.

and seeking international assistance; making and monitoring the implementation of the programme of development assistance (IPA, etc.).”²³⁸⁷

The *Division for Prevention*. Its main duties include “managing the operations and other activities for protection and rescue; implementing the measures for protection and rescue; creating a database of all risks; monitoring and enforcement of laws and other regulations in the field of protection and rescue; participating in the drafting of laws and regulations; making risk assessment and plans for protection against chemical, biological and radiation accident; performing administrative tasks within the jurisdiction and powers established by law in the field of protection and rescue, transport of dangerous goods, manufacturing, transportation, supply, storage and use of explosives, storage, possession, transport, handling and use of flammable liquids and gases; controlling the transport and transit of arms, military equipment and dual-use goods; proposing the system of measures for implementation of established policy and predicting the consequences of legislation.”²³⁸⁸ The division is divided into two departments:

- Department for Risk Management: “It is responsible for the management of the national database of the risks as reported by the National Strategy for Emergency Situations. The duties of the Department encompass the drafting and development of strategic documents and plans at national or inter-municipal levels, cooperation with scientific bodies (universities), laboratories and other research institutions.”²³⁸⁹
- Section for Management of Hazardous Substances (HAZMAT): It has jurisdiction over the activities defined by the Law on Protection and Rescue and other regulations related to this area, including the construction of new buildings, the surveillance of warehouses containing dangerous substances, the transport of dangerous goods and military equipment, and the management of weapons.²³⁹⁰

The *Crisis Management Division*. Its main duties include “implementation of measures for protection and rescue; organising, implementing and monitoring of members of operational units training, as well as organising the exercise of these units; providing the equipment of operational units; developing of programs for professional training of members of operational units; managing and coordinating operational units; coordination of all institutions, companies and institutions in case of a disaster; data collecting and analysis; reporting and informing citizens, legal entities, the Government, emergency responders and authorities, businesses and other stakeholders to protect and rescue using standard operating procedures and coordinating action on call; proposing the system of measures for implementation of established policy and predicting the consequences of legislation.”²³⁹¹ The division is also divided into two departments:

- Department for Training and Operations. “It is in charge of the coordination of all organisations, companies, and State or local authority institutions in emergencies. The department

²³⁸⁷ Website of DES, <http://www.mup.gov.me/rubrike/vanredne-situacije/nadleznosti>.

²³⁸⁸ Ibid.

²³⁸⁹ “Montenegro: Institutional Framework,” see *KMS: Building Resilience to Disasters in the Western Balkans and Turkey*. Available at <http://seekms.dppi.info/countries/general-info-montenegrin/legal-institutional-framework/institutional-framework>.

²³⁹⁰ Ibid.

²³⁹¹ Website of DES, <http://www.mup.gov.me/rubrike/vanredne-situacije/nadleznosti>.

provides municipal departments for protection and rescue and Civil Protection units with the equipment and training needed to cope with all types of risk.”²³⁹²

- Operational communication Centre-112. “The Centre uses the European emergency number 112 and is designed to be a unique communication hub for all types of emergency. Once operational, it will process all the data and information relevant to emergencies, including protection and rescue activities and measures. The Centre will be responsible for broadcasting the information to the public, state institutions, legal entities, rescue units and other competent bodies and subjects for protection and rescue (including the ERCC).”²³⁹³

Helicopter Unit (with the rank of division). “The unit operates four helicopters - „Abell-412“, „Abell-212“, „Abell-206“ and „Gazella“, two planes type „Dromader“ and two aircraft for fire extinguishing type „AT-802A Fire Boss“. It is also responsible for search and rescue operations in Montenegro. The helicopters are also used for tactical transport of equipment and personnel in case of emergencies.”²³⁹⁴

Inspections and Prevention Division. This Division controls functions and operations for protection and rescue; transportation of dangerous goods; manufacturing, transportation, procurement, storage and use of explosives; storage, possession, transport, handling and use of flammable liquids and gases; transport and transit of weapons, military equipment and dual-use goods. For facilities, in which are stored or used in technological process hazardous substances, the Division determines the zone of danger, security systems and other measures to increase security and reduce the risk of various fire-accidents, accidents, incidents, etc.”²³⁹⁵

Regional emergency units. They perform the following tasks, “monitoring and enforcement of laws and other regulations for protection and rescue; assess the risk and protection and rescue plans; implementation of measures for the protection and rescue; formation and organisation units and teams of civil protection; coordinating the actions of participants in protection and rescue units of local self-government; training and exercises members of civil protection units; raising public awareness for emergency response; implementation of the mobilisation of civil protection; collection, information processing and information; rescue activities in the formation of emergencies; proposing a system of measures for the implementation of established policy and forecasting consequences of legal decisions; perform other duties within the scope of the regional unit.”²³⁹⁶

Protection and Rescue Task Forces perform all measures and operations for disaster management and include the following formations:²³⁹⁷

- Civil protection units;
- Units for protection and rescue of municipalities (firefighting units, units for providing assistance to vulnerable and affected population and other protection and rescue units), organised as municipal protection and rescue services;
- Specialised protection and rescue units;
- Volunteers protection and rescue units;

²³⁹² “Montenegro: Institutional Framework,” see *KMS: Building Resilience to Disasters*.

²³⁹³ Ibid.

²³⁹⁴ Ibid.

²³⁹⁵ Ibid.

²³⁹⁶ Website of DES, <http://www.mup.gov.me/rubrike/vanredne-situacije/nadleznosti>.

²³⁹⁷ Law on Protection and Rescue, Art. 14.

- Units for protection and rescue of business organisations and other legal subjects and entrepreneurs; and
- Airborne firefighting unit.

According to a UNDP report as of 2011,

“... the majority of municipalities do not have enough capacity to prepare and protect themselves from existing risks and hazards. The level of capacity is much lower compared to the central level. At the same time, it is the responsibility of the municipalities to fund the municipal protection service (local rescuers). However, in most of the cases, funding is limited to salaries only. Some municipalities, however, have established reserve funds for first immediate response and some have mid- and long-term development plans (as in the municipality of Bar). Nevertheless, plans do not, in most cases, include the existing risks and hazards. Information flow from institutions such as the Hydrometeorological Institute of Montenegro to municipal level is not regular and is not clearly framed. Municipalities are also not mandated to have cross-border cooperation with municipalities from neighbouring countries.” (UNDP, 2011)

The Institute for Hydrometeorological and Seismological Service of Montenegro (IHMS) is another organisation with an important role in disaster risk reduction, mitigation and protection. The institute is under the Ministry of Sustainable Development and Tourism. The IHMS tasks are explained in chapter 2.4. The institute has 112 staff members, of which 59 are based in Podgorica. The table below provides details on its organisation.²³⁹⁸

The Department of Seismology in IHMS is in practice the Seismological Observatory of Montenegro. It exists since 1979 and is currently being transferred to the Ministry of Sustainable Development and Tourism and IHMS. “The Observatory operates the seismic observation network, prepares regional and micro-local maps, and conducts research on earthquake effects on building structures, ground, water courses, and many more.”²³⁹⁹ The Observatory is organised in two departments within IHMS:

- “Department for instrumental and engineering seismology responsible for recording of seismic data for earthquakes in Montenegro and its surroundings, technical maintenance of seismic and GPS instruments on all stations in seismological network, calibrating of seismographs and accelerographs, upgrading of equipment for acquisition of

²³⁹⁸ Source: <http://www.meteo.co.me/misc.php?text=about>

²³⁹⁹ EU, *IPA Beneficiary Country Needs Assessment Montenegro*, p.12.

Table 44. Organisational chart of the Institute for Hydrometeorological and Seismological Service of Montenegro.

Department	Sector	Section (group)
Weather forecast and monitoring	Analysis and weather forecast; Meteorological monitoring	Weather forecast and modelling; Regional units; Satellite and radar meteorology
Meteorology	Climatology; Applied meteorology	
Hydrography and oceanography	Hydrology network stations; Hydrology analysis	Hydrography data and analysis
Water, air quality control	Water quality control; Air quality control	
Seismology	Instrumental and engineering seismology; Seismic data analysis and processing	
	Hydrometeorological Information systems	
	Administration and finance	
	PR and international cooperation	

seismic data, processing and maintenance of database of digital accelerograms, processing of macro-seismic data for strong and catastrophic earthquakes, determination of seismic hazard elements, etc.”²⁴⁰⁰

- “Department for seismic data analysis and processing in charge for couple levels of automatic acquisition of seismic signals generated by earthquakes and explosions, modern numerical and graphical analysis and processing of seismic and GPS data, quantification of parameters for actual and historical seismicity in Montenegro, seismo-tectonic interpretation of seismic data, focal mechanism solutions for stronger earthquakes in region, seismological database maintenance, modernisation of methods and computer programs for seismic and geodynamic analysis, publishing and exchange of seismic data, etc.”²⁴⁰¹

The Ministry of Defence (MoD) controls the Security Forces of Montenegro. The National Security Strategy determines as one of the internal tasks of the Montenegro Security Forces: “Providing support to state institutions and authorities in cases of environmental, natural or man-made disasters of greater scale, as well as in cases of human or animal epiDESics, where human life, environment and material goods are under considerable threat ...”²⁴⁰² However, according to an international study (UNDP, 2011), the role of the MoD in disasters is not clear and has not been identified at the national level or indeed within the ministry itself. In practice, during the floods of December 2010, the MoD’s Operations Centre reported to the operations centre of the DES and based on an informal and personal level the cooperation worked well.

C) Local level

²⁴⁰⁰ Hydrometeorological and Seismological Service of Montenegro’s website at www.seismo.co.me/Staff.htm.

²⁴⁰¹ Ibid.

²⁴⁰² National Security Strategy, Art. 5.

At the local level, municipal teams are only responsible for the management of emergencies. These teams are led by the president/governor of each municipality. A deputy of SEM is present in each municipality to coordinate sectoral activities and serve as the link between the government body and municipalities. The fire-fighting service, with its Municipal Rescue and Protection Units, plays an important role. Currently, 450 people are attached to these units. (EU-UNDP, 2011)

3.2 Organisational cooperation

Within the current legal and institutional framework, the organisational cooperation is mostly operational. The way the system works in the most dangerous situations of seismic and flooding emergencies is presented in Table 5.

Table 45. Functional scheme of Montenegro disaster (floods and seismic) response system

Function	Lead body	Sources; forces
Early warning	IHMS	Other entities International sources Citizen
Notification and alerting	DES: Operational Communications Centre 112	Local authorities; Enterprises Specialised NGO organisations
Coordination 1 (Operational)	DES	Inter-institutional and central-local coordination at administrative level
Coordination 2 (Political)	Emergency Management Coordination Team	Government level coordination (in cases of serious emergencies)
Operations	Task force(s)	Civil protection units; Units for protection and rescue of municipalities (firefighting units, units for providing assistance to vulnerable and affected population and other protection and rescue units), organised as municipal protection and rescue services; Specialised protection and rescue units; Voluntary protection and rescue units; Units for protection and rescue of business organisations and other legal subjects and entrepreneurs; and Airborne firefighting unit.
		International support

Considering the size of the country and its geological setting, trans-boundary initiatives play a crucial role in disaster mitigation and preparedness.²⁴⁰³

DES has signed bilateral partnership agreements with Albania, Bosnia and Herzegovina, Slovenia, Croatia, Macedonia, Greece, Serbia and the Russian Federation, which define a common protocol for cross-border cooperation in the event of natural disasters. The latest flood emergencies have proved

²⁴⁰³ Source: <http://drace-project.org/index.php/map/montenegro>.

that these agreements are efficient, especially regarding the provision of support, custom lifting and fast entry for rescue teams.

According to the EU study (EU, 2011), Montenegro participates in the following regional activities:

- “The Disaster Preparedness and Prevention Initiative for South Eastern Europe and the EU-funded PPRD South Programme, to implement HFA objectives and priorities;
- The Civil Military Emergency Planning for South Eastern Europe, in cooperation with the U.S. Army Engineering Corps, to improve the civil-military coordination of disaster preparedness and response;
- The Drought Monitoring Centre for South East Europe, the European Centre for Medium-Range Weather Forecasts and the Accident Reporting Guidance Operational System (ARGOS) to upgrade its hydro-meteorological services, weather forecasting products and early warning system;
- The Project SHARE (Seismic Hazard Harmonisation in Europe, 2009–2012), within the Seventh Framework Program of the European Commission, to provide an updated, living seismic hazard model for the Euro-Mediterranean region²⁴⁰⁴ and NATO’s Science for Peace project „Harmonisation of Seismic Hazard Maps for the Western Balkan Countries“, whose end product will be an integrated database organised in GIS applications for the whole region with a regional earthquake catalogue and seismic hazard maps.”²⁴⁰⁵

Specific memorandums of understanding in the field of education, technical training, preparedness and prevention are being considered with Turkey and Italy.²⁴⁰⁶

While a number of regional agreements are signed at the central level, municipalities do not have the mandate to replicate this process at local level. Regarding the capacity of Montenegro’s crisis response institutions to benefit from regional coordination and cooperation, leveraging expertise, capacities, resources and information across the region among SEE countries and with various regional centres in Europe the assessment of the EU – UNDP from 2011 is that the effectiveness of international cooperation is quite low, “...partially because of lack of experts and acaDESic staff with good skills in European languages, especially English. This aspect is often under considered, but it dramatically hampers the participation of personnel to international workshops or training.”²⁴⁰⁷ (EU-UNDP, 2011)

²⁴⁰⁴ Source: <http://www.share-eu.org/>.

²⁴⁰⁵ EU, *IPA Beneficiary Country Needs Assessment Montenegro*, p. 26.

²⁴⁰⁶ The Structure, Role and Mandate of Civil Protection in DRR for SEE, 2008.

²⁴⁰⁷ International organisations also contribute to the strengthening of DRR through the UN’s Regional Disaster Risk Reduction Overview Course, UNDP projects such as the Spatial Planning Support Project, or the German Gesellschaft für Technische Zusammenarbeit and World Bank Land Administration and Management Project.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Recently, there are no by-laws and standard operational procedures (SOPs) for civil protection operations in Montenegro that to be relevant to all stakeholders. Sops have been established for some components as the Operational Communication Centre “112.”

However, in 2013, the Department for Emergency Management has sent for coordination the final version of the Standard Operating Procedures (SOP) for crossing the border in the event of natural disasters involving the Ministry of Internal Affairs of Montenegro and the Ministry of Internal Affairs of the Republic of Serbia.²⁴⁰⁸

According to the UNDP study as of 2011, the MoD is considering the development of internal SOPs for army participation in disaster response operations.

4.2 Operations planning

The normative ground for operational planning is the Rulebook on Methodology for the Development of Protection and Rescue Plans.²⁴⁰⁹

The overall national-level planning document on disaster management is the National Plan for Rescue and Protection. The plan is based on the vulnerability assessments for all major hazards, as the National Strategy has outlined them for Emergency Situations. The set of hazard-based national plans includes:²⁴¹⁰

- National Plan for Protection from Earthquakes;
- National Plan for Fire Protection;
- National Plan for Protection Against Chemical Accidents;
- National Plan for Protection Against Biological Accidents;
- National Plan for Protection Against Radiation Accidents;
- National Plan for Search and Rescue in Civil Aviation Incidents and Accidents;
- National Plan for Protection Against Floods;
- National Plan for Protection Against Landslides and Avalanches;
- National Plan for Protection from Extreme Weather Phenomena;
- National Plan for Protection from Traffic Accidents on Road and Rail;
- National Plan for Protection from Technical and Technological Hazards;

²⁴⁰⁸ Izveštaj o stanju sistema zaštite i spašavanja u Crnoj Gori u 2013 godini.

²⁴⁰⁹ The Ministry of Interior, *Rulebook on Methodology for the Development of Protection and Rescue Plans*. Available at <http://www.sluzbenilist.me/PrevPropPreuzimanje.aspx?tag=%7B4C4F661B-C938-4F93-9C8B-23ABC5D1FC6F%7D>.

²⁴¹⁰ Cross-referenced from Disaster Risk Reduction Capacity Assessment Report For Montenegro, (UNDP: April 2011) and the United Nations Office for Coordination of Humanitarian Affairs (UNOCHA) mission report to Montenegro in November 2010.

- National Plan for Protection from Destruction of Power Plants.

As the floods are the current most serious source of risk, the authorities in Montenegro pay special attention to prevention, rescue and relief measures in cases of heavy rains and flooding. According to a 2015 Montenegro report on the transposition of Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks,

*Preventive measures regarding protection from floods are prepared and implemented by the Ministry of Agriculture and Rural Development and Water Directorate, on the grounds of the Law on Water and General Plan for protection from adverse effects of water for water areas which are important for Montenegro, along with Operational Plans for protection from adverse effects of water. Preventive measures include: regulation of watercourse, building protection structures (dams), cleaning and deepening of watercourses, maintenance and repair of damaged parts of protection structures, observation and reconnaissance of the state of watercourses and high dams etc.*²⁴¹¹

4.3 Logistics support in crises

The Law on Protection and Rescue prescribes that, in the case of imminent threat or in time of emergency on the territory of municipality, the president of municipality have the right and obligation to mobilise all human and material resources from the territory of that municipality, in accordance with the municipal plan. Mobilised persons and material resources shall be entitled to reimbursement of expenses from the municipal budget, in accordance with the regulation of the municipality.

Concerned the citizen, the Law (Art. 61) stipulates that they have to make available to civil protection units the use of vehicles, machines, equipment and other material resources, land, facilities, devices and energy sources, necessary for protection and rescue in case of introduction of “state of emergency”.

Material obligation is also considered to be the placing of instruments and devices for observing, notifying and informing on commercial and other buildings, and as an exception, on residential buildings as well, if the instruments and devices can not be placed on other buildings. The material obligation may be ordered to legal persons and entrepreneurs as well.

Military logistic support has been and could be provide based on decision of the Emergency Management Coordination Team.

²⁴¹¹ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, available at <http://www.eu.me/en/library/category/217-water-quality?download=1163:floods-directive>.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The Emergency Management Coordination Team (EMCT) is tasked with management of the national early warning system.²⁴¹²

The early warning system (EWS) is currently in the process of being developed. The system is located with the DES, and each relevant ministry and institution has place within it.

According to the internal regulations of the Ministry of Interior, the “Section 112” of DES – “Operations and Communications Centre 112” performs the activities related to the coordination and management of search and rescue operations. The centre is collecting information and data, reporting and informing citizens, legal entities, government, emergency responders and authorities, businesses and other stakeholders in accordance with standard operating procedures.

The unit is also calling operational units in the event of mobilisation; preparing and sending requests to seek international assistance in case of emergencies; preparing the notification of threats and disasters that may threaten the neighbouring countries; establishing communication with the state’s crisis centre, and centres for search and rescue of countries in the region.

The centre is administrating and maintaining security database and geographic information system, keeping proper records, and performs other tasks within the scope of the DES.²⁴¹³

However, according to an official report, problems of a technical nature prevent completion of the project. The system is still not fully operational because the missing optical cables connections between ECC 112 in Podgorica, Bijelo Polje and Bar, and the hub at the Ministry of Interior and radio communications between all locations of EEC 112. (MoI, 2014)

As the system of 112 is still in the development phase and the television and radio is not always reliable in diffusing priority information, the current dissemination mechanism of warnings and advisories is not very efficient, especially to those situated in threatened areas. The warnings given directly to the public via the IHMS web pages are a very passive dissemination channel and do not actively meet people, authorities and public when needed.

While the DES issues warnings and coordinates action with municipal representatives, the Parliament alone has the power to declare a national state of emergency. A major problem is the lack of clear guidelines as to how this decision is reached and how national emergencies should be announced to the public. Additional procedures concerning support of national and local authorities should be established, as well as a classification of emergencies and alerts. (EU-UNDP, 2011)

²⁴¹² Improving the System is one of Montenegro’s development priorities; however no fixed budget is allocated and progress is highly dependent on external funding. A major stride was the implementation of the large-scale fire detection system FIREWATCH by the DES in collaboration with German partners. Considerable progress towards establishing real-time data exchange for hydro-meteorological, seismic and fire hazards at national and cross-border level was made with help of WMO following catastrophes such as the earthquakes and floods at the end of the last decade. Currently, the DES is working to expand early warning systems and data exchange to a broader range of natural hazards (EU-UNDP, 2011).

²⁴¹³ Pravilnik o Unutrašnjim Organizaciji i Sistematizaciji Ministarstva Unutrašnjih Poslova, Art. 3.3.2.

5 Capabilities

Human and material resources are considered as a very important component of the system of protection and rescue. It is essential that all subjects of protection and rescue operations at the state and municipal levels are provided with resources to promptly undertake all planned and extraordinary measures for prevention of hazards and protection and rescue in case of disasters.

5.1 Human resources

According to the Government annual report (Mol, 2014), in 2013 the Directorate of Emergency Situations has employed 106 employees: 55 officers with higher education (of whom seven masters of science), 3 positions with a college degree and 48 officers with a high school diploma. From a total of 106 employees of civil servants and employees, 32 of them or 30.19% are women, and 74 or 69.81% are men.

In all municipalities in Montenegro organisations (units) for protection and rescue services have been formed. 582 members, of which 530 members have been permanently employed, and 52 - hired on contract have served in these units.

Pursuant to Article 65 of the Law on Protection and Rescue, Ministry of Internal Affairs has concluded a contract with rescue specialists (organised also in units). At the end of 2013 a contract was signed with Mountain Rescue Courier Service. It has been established full cooperation of the Mol with the Red Cross of Montenegro and numerous joint activities on improving the system of protection and rescue have been planned and undertaken.

As part of the protection and rescue system, the volunteer fire departments that operate with a long tradition in the municipalities of Tivat and Kotor are of particular importance. In addition, procedures have been initiated for the establishment of volunteer fire companies in the capital Podgorica and in Banjani (the municipality of Niksic).

Entrepreneurial units, as a kind of operating units, are considered as very important because of the willingness to provide an adequate first response to certain types of hazards (fire), which may happen in a company, other legal entity or an entrepreneur. Entrepreneurial units are organised in White Shipyard, airports Tivat and Podgorica, Bar Harbor, KAP, Tjeljezara Niksic, Pljevlja thermal power plants and at "Monteput" Podgorica.

Units for extinguishing fires from the air (i.e. the helicopter unit of the DES) is organised as a directorate within the Directorate for Emergency Situations. The total number of officers is 17, of whom 14 have been employed on full-time while three have been engaged under a contract of work. In addition to the above, in the course of fire season, contractors engage the additional four executors.

5.2 Materiel (non-financial) resources

Ensuring equipment, instruments and materials is a precondition for the establishment of a system of protection and rescue services. Units have to be able to act immediately and as long as it is necessary to respond to disasters.

Facilities, accommodating service protection and rescue units in Podgorica, Bar, Budva and Niksic, Bijelo Polje, Mojkovac, Herceg Novi, Zabljak, Ulcinj, Rožaje, Berane and Cetinje, meet the accommodation requirements of professional members of the protection and rescue services. In Savnik, the unit shall move into a new facility, expected in the second quarter of 2014. In the municipality Andrijevci, by a donation from the US Embassy in Podgorica, an object in the former barracks of the Army of Montenegro has been reconstructed, thereby creating conditions for normal operation and functioning of these units.

5.3 Training

Training of protection and rescue services

Training on floods and fire response have been organised in cooperation with the US Embassy, the Ministry of Defence, the Ministry of Interior, the Red Cross and NGOs. However, these training are not coordinated and do not always benefit of adequate facilities. Done on an ad hoc basis, they do not facilitate the understanding of the specific roles and responsibilities of the various actors, including the role of technical agencies such as the IHMS. More in-depth training on understanding disasters and their impacts are needed to complement experience with technical knowledge.

Despite its limited number of forecasters, meteorological and hydrological experts, the IHMS participates in UNISDR courses and is currently involved in the development of an international strategy for risk reduction, which consists of 22 workshops that brings international expertise.

Training of the protection, search and rescue teams at the local level is provided and funded by the municipalities. However, it is not always offered in a systematic way nor does it always reach out to all the municipal staff, since the size of the budget for preparedness and response activities is left to the appreciation of the municipalities.

Police and NGOs have their own training programs. The MRC has been training its preparedness and response teams in first aid at local, national and regional level. Some elements of the regional disaster response teams have been trained for international deployment. (EU-UNDP, 2011)

Table 46. The flying experience of the Helicopter unit in 2013

Aircraft	Number of flights	Time
Helicopter AB 206	152	65:12
Helicopter AB 212	267	87:06
Helicopter AB 412	278	72:06
Aircraft AT 802 A s/n 0281	31	5:30

Source: Ministry of Interior Annual Report 2014

Training centres

Training activities are mostly geared towards various rescue and recovery specialists. The DES has currently one training centre within the Police AcaDESy in Danilovgrad for the training and education of rescue units. However, it is very much oriented towards theory. There are plans to open three training centres across the country that will deal with the special training needs of rescue units in a more practical way. DRR training programmes in relation to specific hazards are delivered regularly by the DES for personnel involved in civil protection activities such as central and municipal rescue teams, fire-fighters, operational units, but also decision-makers at central level and the public. Worthy of note is a training course for seismic hazards, organised with the support of the French Sécurité Civile.

Hazards and disasters awareness rising

There are limited resources for capacity development and no formal process of awareness rising is in place. Moreover, legislation does not specify which governmental body is responsible for implementing DRR awareness raising projects, and authorities still lack DRR knowledge in order to design campaigns, especially as the DES only addresses DRR since 2010. According to the government, awareness-raising activities are especially limited at the local level. This greatly increases the population's vulnerability. "To name just one example, no awareness raising activity was done in the highly earthquake-prone region of Berane."²⁴¹⁴

The Bureau of Public Relations, the Government of Montenegro and the DES coordinate media plans oriented towards public awareness of hazards and prevention, but the involvement of the media Directorate to advocate DRR needs to be developed. Among the population and the media, awareness of disaster-related issues or preparedness and response is often limited, which can lead to inaccurate or inadequate information broadcasts.

Although the Montenegro Red Cross did not conduct any awareness raising activities until now, it plans to do so in the future by joining the Red Cross DRR regional programme and further cooperating with DES. Actions have already been targeted at schools and the MRC plans to organise a DRR campaign together with governmental and non-governmental organisations. Ad hoc awareness raising events have been undergone by „Green Home” and the United States Agency for International Development, although the public service campaign did not specifically focus on DRR. The Fire Union of Montenegro has been educating the population about fire protection.²⁴¹⁵

Apart from occasional events, like classes visiting fire brigade units, DRR is not yet integrated into school curricula. This is likely to change when the primary education system reforms of 2010 are implemented. One of the reform plans for 40 optional modules, out of which one should include DRR content. Also, weekly lessons focusing on protection and rescue, what action to take in emergency situations and containing an introduction to natural hazards on the territory of Montenegro should be offered by head teachers. On the other hand, the reform cut the budget allocated to teacher training, including the training targeting disaster response. Educating children will be a difficult task for teachers, if they do not have the knowledge themselves.

A EUR 40,000 awareness project, which is part of the EU-funded Programme on Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD South), is targeted at 5,000 6th grade students (aged 12) in 62 pilot primary schools in Montenegro. The project will inform

²⁴¹⁴ EU, *IPA Beneficiary Country Needs Assessment Montenegro*, p. 21.

²⁴¹⁵ Report of Montenegro Ministry of Internal Affairs, Report of Montenegro to the United Nations' World Conference on Disasters Reduction (WCDR, Kobe-Hyogo, Japan, 2005).

children about actions they and their family should take before and after earthquakes. If the subject „Protection and Rescue from Natural Disasters and other Man-made Accidents” is effectively re-introduced in the curricula of 7-9 grade students, this first awareness project would constitute an ideal introduction to disasters.²⁴¹⁶

No university program focuses on DRR only, but civil engineering, architectonic planning are taught at the Civil Engineering Faculty in Podgorica.²⁴¹⁷

5.4 Procurement

5.4.1 Procurement regulation

The basic Montenegro legislation on procurement is the Law on Public Procurement (Official Gazette of MNE, no. 42/11). However, concerned the disaster management, the Law stipulate that its provisions do not apply to: “Procurement aimed at protection and recovery from catastrophes and major disasters – state of emergency.” (Art.3)²⁴¹⁸

The Public Procurement Directorate, Ministry of Finance as a line ministry, and the Commission for Control of Public Procurement Procedure have competencies and are responsible for the control of public procurement procedures. The Ministry of Finance supervises the legality and effectiveness of administration operations. Judicial control over the legality of the public procurement procedures is ensured by the administrative dispute before the Administrative Court of Montenegro.

The Public Procurement Administration, in accordance with Article 19 of the Public Procurement Law and its scope of work established by Article 42 of the Decree on Organisation and Manner of Work of the State Administration, shall be entitled to perform the following tasks:

1. *“To monitor implementation of the public procurement system;*
2. *To monitor the compliance of the legislation regulating the public procurement system with EU legislation, to prepare technical basis, to initiate and participate in preparation of the public procurement regulations;*
3. *To give approval to contracting authorities on fulfilment of conditions for conducting certain public procurement procedure in the cases envisaged by this Law;*
4. *To provide advisory assistance upon contracting authority’s request;*
5. *To organise and conduct professional development and advanced training of the human resources in charge of performing public procurement tasks;*
6. *To organise professional exam for performing tasks in the area of public procurement;*
7. *To establish and maintain the Public Procurement Portal for the purpose of ensuring transparency of public procurement;*
8. *To publish public procurement plans, contract notices, decisions on candidates’ qualifications, decisions on selection of the most favourable bid, decisions on*

²⁴¹⁶ www.euromedcp.eu/en/countries/montenegro/724-awareness-campaign-under-the-slogan-starts-in-montenegro.html.

²⁴¹⁷ Report of Montenegro Ministry of Internal Affairs, Report of Montenegro to the United Nations’ World Conference on Disasters Reduction (WCDR, Kobe-Hyogo, Japan, 2005).

²⁴¹⁸ Downloaded from: <http://www.ujn.gov.me/en/novi-zakon-o-javnim-nabavkama-crne-gore/>.

suspension of public procurement procedure, decisions on annulment of public procurement procedure, public procurement contracts, changes or amendments of public procurement plans, contract notices, decisions and contracts, as well as of other acts in accordance with this Law;

9. *To prepare and publish a List of contracting authorities on the Public Procurement Portal;*
10. *To encourage the conducting of public procurement in electronic form;*
11. *To pursue cooperation with international organisations, institutions and specialists in the field of public procurement;*
12. *To prepare and submit to the Government annual reports on the public procurement, carried out in the previous year;*
13. *To prepare and publish a list of bidders on the basis of decisions on selection of the most favourable bid;*
14. *To prepare and publish a common public procurement vocabulary on the Public Procurement Portal;*
15. *To perform inspection control;*
16. *To issue publications and other technical literature;*
17. *To perform other tasks, in accordance with the Law.”²⁴¹⁹*

Montenegro has adopted the following EU directives, relevant to procurement:

- Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts;
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014;
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014.

5.4.2 Procurement procedures

Types of Procedures

According to the Law on Public Procurement (Art. 20), “*public procurement procedures for goods, services or works are as follows:*

- *Open procedure;*
- *Restricted procedure;*
- *Negotiated procedure with prior publication of a contract notice;*
- *Negotiated procedure without prior publication of a contract notice*
- *Framework agreement;*
- *Consulting services;*
- *Contest;*
- *Shopping method;*
- *Direct agreement.”*

Value scales

²⁴¹⁹ From the web site of the Public Procurement Administration of Montenegro
<http://www.ujn.gov.me/en/nadleznosti/>.

The public procurement procedure shall be determined according to the estimated value of the public procurement, which is classified into the following value scales:

- I Value scale – in cases when the estimated value of the public procurement is up to EUR 5,000, the contracting authority shall perform the direct agreement;
- II Value scale – in cases when the estimated value of the public procurement exceeds EUR 5,000 up to EUR 25,000 for procurement of goods or services, or when the estimated contract value exceeds EUR 5,000 up to EUR 50,000 for procurement of works, the contracting authority shall perform the shopping method;
- III Value scale – in cases when the estimated value of the public procurement exceeds EUR 25,000 for procurement of goods or services, or when the estimated contract value exceeds EUR 50,000 for procurement of works, the contracting authority shall perform some of the procedures listed in Article 20 items 1 to 7 of this Law.

Electronic Licence Registry

According to the Public Procurement Administration of Montenegro, “the Registry is available at the Internet address www.licenca.me and includes 540 licenses, permits and approvals for performing the economic activities issued by 36 institutions. The Chamber of Commerce is responsible for maintenance of the Registry, in cooperation with the Ministry of Finance.”²⁴²⁰

5.5 Niche capabilities

Montenegro suffers from insufficient disaster response capabilities due to limited funding and other resources. However, country’s plans are focussed on building capacities for mostly for response to floods and heavy snows in the mountains emergencies.

However, as the EU monitoring mechanism has stated, Montenegro is satisfactorily aligned with the EU civil protection acquis. Nevertheless, the country will need to further improve its administrative capacity in order to align the system with standards and good practices of the Member States. Technical and material resources need to be enhanced, in particular by further equipping and training civil protection and other concerned staff to reach a sound basis for adequate support for risk prevention and preparedness as well as necessary response in case of emergencies. Given the frequency of disasters in the country, disaster risk reduction and disaster management should be treated as a matter of priority at national and local level (EU, 2013).

²⁴²⁰ Source: <http://www.ujn.gov.me/en/elektronski-registar-licenci/>.

Resources

Legislative acts

Law on Public Procurement

Zakon o Hidrografskoj Djelatnosti

Zakon o Hidrometeorološkim Poslovima

Directives

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Screening report Montenegro, Chapter 27 – Environment and climate change, March 2013. http://ec.europa.eu/enlargement/pdf/montenegro/screening_reports/screening_report_montenegro_ch27.pdf.

The Government, Strategy of National Security of Montenegro (2006), www.gov.me/biblioteka/1154096856.doc.

Online resources (e.g. websites of key CM organisations)

Institute for Hydrometeorological and Seismological Service of Montenegro, <http://www.meteo.co.me/index.php>

Ministry for Spatial Planning and Environment of Montenegro

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Driving Innovation in Crisis Management for **E**uropean **R**esilience

NORWAY

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: MSB (Kristen Arnell, Marie Norrby)

Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by CSDM and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Norway consists of 19 counties (fylker, singular - fylke): Akershus, Aust-Agder, Buskerud, Finnmark, Hedmark, Hordaland, More og Romsdal, Nordland, Nord-Trøndelag, Oppland, Oslo, Østfold, Rogaland, Sogn og Fjordane, Sør-Trøndelag, Telemark, Troms, Vest-Agder and Vestfold.

Each county is administered by a county council (elected by the people) responsible for local affairs, and a county governor, who is the King and Government's representative in the county to implement the Parliament's and Government's decisions. The county governor is appointed by the King in Council, and is responsible for the administration of national (central) affairs at the county level. There are, however, only 18 county governors, as two regions (Oslo and Akershus) are organised with a common governor. At the local level, there are 430 municipalities. The capital, Oslo, is both a county and a municipality. The municipalities are led by a popularly elected municipal board, with tax raising powers and a broad range of political responsibilities in providing local services to the population.

In the area of national preparedness, the Norwegian Directorate for Civil Protection and Emergency Planning (DSB) is to support the Ministry of Justice and the Police in its coordinating role, develop and maintain national emergency preparedness and response plans and give advice and report to the Ministry and the Government in connection with national crisis management. The Directorate was established in 2003, and its objective is to maintain a full overview of the risk and vulnerability in society, promote measures which prevent accidents, crises and other undesirable incidents, and ensure sufficient emergency planning and efficient management of accidents and crises.

The DSB provides information and advice and carries out supervision of ministries, county governors and municipalities. Research, studies and documentation related to the development of national vulnerability and the changing threat scenario make up an important part of the Directorate's work, as a basis for planning emergency preparedness, response and priorities. The Directorate plans and conducts exercises in crisis management and crisis communication for strategic management at the national, regional and local levels.

Furthermore, the DSB is the national public authority for municipal and inter-municipal fire services, the local electrical safety inspection authorities and the county governors' emergency preparedness and response work. The DSB is also responsible for the professional and administrative follow-up of the Norwegian Civil Defence, the Emergency Planning College, the Norwegian Fire Academy and the Civil Defence's three regional schools.

The Civil Defence Organisation is an operative part of the DSB. The DSB is responsible for the education and training of Civil Defence Forces. Its activities are organised around the head office in Tønsberg and Oslo, 20 civil defence districts, five civil defence camps, five schools and five regional inspectorates for inspection and control of electrical safety.

Typical risks include weather related hazards, critical infrastructure e.g. power supplies and some geo related hazards such as landslides.²⁴²¹

²⁴²¹https://www.regjeringen.no/globalassets/departementene/fd/dokumenter/rapporter-og-regelverk/fd_stotte-samarbeid_web_april.pdf

Table of Contents

NORWAY Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1788
Overview	1789
Table of Contents	1790
List of Figures	1792
List of Abbreviations.....	1792
1 Policy	1793
1.1 Risk Assessment.....	1793
1.2 Policy and Governance	1793
1.2.1 Structure of civil emergency planning	1793
1.2.2 Strategy scope and focus	1794
1.2.3 Civil military cooperation	1798
1.2.4 Monitoring and analytical support to policy making; R&D	1798
1.3 Financing	1798
1.3.1 Investing in preparedness	1798
1.3.2 Investing in consequence management	1799
1.4 Policy review, Evaluation & Organisational Learning	1799
1.4.1 Post-Disaster Assessment	1799
1.4.2 Departmental Lessons Learned systems	1799
1.4.3 Centralised (national) Lessons Learned system	1799
1.4.4 International exchange for Lessons Learned	1799
1.4.5 Regular policy reviews	1800
1.5 Resilience	1800
1.6 Information sharing and data protection	1800
2 Legislation	1801
2.1 Crisis (emergency, disaster) management concept.....	1801
2.2 General crisis (emergency, disaster) management law.....	1801
2.3 Emergency rule	1802
2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1802
2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1802
2.6 Legal regulations on the involvement of volunteers and specialised NGOs	1802

2.7	Legal regulations for international co-operations	1802
2.7.1	Nordred agreement	1803
2.7.2	NORDEFECO-Nordic Defence Co-operation	1803
2.7.3	Haga declaration	1803
2.7.4	Haga declaration II – a robust nordic region	1804
2.7.5	Nordic Medical agreement	1804
3	Organisation	1805
3.1	Organisational chart	1805
3.2	Organisational cooperation	1807
4	Procedures	1808
4.1	Standing Operating Procedures (SOPs) and Guidelines	1808
4.2	Operations planning	1808
4.3	Logistics support in crises	1808
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1808
5	Capabilities	1809
5.1	Human resources	1809
5.2	Materiel (non-financial) resources	1809
5.3	Training	1809
5.4	Procurement	1810
5.4.1	Procurement regulation	1810
5.4.2	Procurement procedures	1810
5.5	Niche capabilities	1810
	Resources	1811
	Legislative acts	1811
	Other normative acts	1811
	Official documents (white papers, strategies, etc.)	1811
	Online resources (e.g. websites of key CM organizations)	1811
	Publications	1812
	Expert interviews	1812

List of Figures

<i>Figure 1: Principle lay out of Norway's international co-operation within crisis management</i>	<i>1803</i>
<i>Figure 2: Organisation of a major rescue operation.</i>	<i>1805</i>
<i>Figure 3: General lay out of how Norway organise its Crisis Management.</i>	<i>1806</i>

List of Abbreviations

CTIF	International Fire and Rescue Service Association
DSB	[Norwegian] Directorate for Civil Protection
SSB	Statistics Norway

1 Policy

1.1 Risk Assessment

Risk assessments are done by all levels in the public sectors.

Local level: 434 municipalities

Regional level: 19 County Boards, 5 Hospital Regions, 27 Regional Police authorities

National level: All governmental agencies

Risk assessments are also done by the private sector that can affect the population and environment like Seveso plants and Energy sector.

1.2 Policy and Governance²⁴²²

Norway is a constitutional monarchy. The executive power rests formally with the King, but in practice with the government, and the legislative power rests with the unicameral parliament. The King, with the parliament's approval, appoints the government, and both the prime minister and each cabinet minister are judicially directly responsible to the parliament. Each minister is normally in charge of a ministry, which is responsible for carrying out public administration in his or her field. The regional level consists of 19 counties, the county governor being the highest representative of the central government. There are however, only 18 county governors as two regions (Oslo and Akershus) are organised with a common

Governor. At the local level there are 430 municipalities. The capital, Oslo, is both a county and a municipality. The municipalities are led by a popularly elected municipal board, with tax raising powers, and a broad range of political responsibilities in providing local services to the population.

1.2.1 Structure of civil emergency planning

The concept of Total Defence is still a guiding doctrine in Norwegian crisis emergency planning (CEP). However, the focus of the concept has changed, from mobilization of all national resources in support of an all-out military struggle, to a focus on societal security. Total Defence is now broader and a two-way street, where civilian resources can provide support in the time of military crises, and the military is operationally prepared to assist civilian society in times of need, regardless of whether this is due to man-made or natural disasters. Societal security is defined as safeguarding the population and key societal functions and infrastructure against attack or damage where the existence of the country is not threatened. The work on safety and security in society is furthermore based upon the principles of liability, decentralisation and conformity. Together these principles are

²⁴²² <https://www.msb.se/RibData/Filer/pdf/24677.pdf>

the foundation for establishing efficient crisis prevention and crisis management.²⁴²³ Crisis in regard to nuclear accidents are handled by a specific organisation called “atomberedskapsorganisajonen” (nuclear readiness organisation)²⁴²⁴

- The principle of liability states corresponding responsibility either when dealing with a normal everyday situation or an extraordinary situation. This principle applies to all public and private activities. In addition, each citizen is responsible for his or her own safety. Responsibility for the functions of normal, everyday activities, will presumably improve the ability to handle critical situations. Thus, each ministry is responsible for emergency planning within its own sector. However, the Ministry of Justice and the Police has been given a more distinct responsibility for coordinating the administration of work on safety, security and emergency planning within the civil sector in general.
- The principle of decentralisation states that the responsibility for crisis management should be handled at the lowest possible level. The principle of conformity states that society must be able to operate in accordance with normal standards no matter what challenges it is exposed to, and that the structures of responsibility are maintained in extraordinary situations.
- Holistic and coordinated crisis management centrally, regionally and locally.

1.2.2 Strategy scope and focus

The politically defined objectives for the work on safety and security of Norwegian society are based on the notion that emergencies should be prevented, and that emergencies that arise should be tackled in the best way possible. Basically, society must be able to meet any threat and handle any situation that may occur. The central objective is ensuring that interruptions to important societal functions and large accidents will not entail large societal losses, to initiate measures preparing society to meet any challenge and securing emergency planning in general. The government has been working on strengthening the following:

- Preventive activities, including health, environment and security work.
- Ensuring that agencies with emergency responsibilities are able to tackle major incidents, including acts of terrorism and/or mass destruction.
- Coordinated and purposeful work with regard to ensuring critical infrastructure protection.
- Increased cooperation, including plans and exercises, between civil and military authorities.
- The ability of intelligence and security services to analyse, warn and prevent different forms of terrorism in Norway.

Crisis emergency planning organisational structure

The executive authorities must at all times be prepared to manage any crisis that may occur. A basis for crisis management is the corresponding responsibility when dealing with a normal everyday

²⁴²³https://www.regjeringen.no/globalassets/departementene/fd/dokumenter/rapporter-og-regelverk/fd_stotte-samarbeid_web_april.pdf

²⁴²⁴https://www.regjeringen.no/globalassets/departementene/fd/dokumenter/rapporter-og-regelverk/fd_stotte-samarbeid_web_april.pdf

situation or a crisis situation or war. This is in accordance with the principles of liability and decentralisation previously mentioned. However, in 2006 the government decided to strengthen the central crisis management by introducing 3 strategic elements. First, a ministerial level council to improve crisis coordination was created in what has been named the Government Crisis Council. Secondly, a clarification of overall responsibility for crisis management at the central level was established through the concept of a Lead Ministry. And thirdly, a support and assist function for the Lead Ministry and the Government Crisis Council is the task of the Crisis Support Unit.

The Government Crisis Council is chaired by the Secretary General in the lead ministry and is the top-level strategic coordinating body during crises in which there is a need for extensive coordination among several ministries. The Government Crisis Council handles coordination of affected ministries and furnishes coordinated information and necessary documentation to the government. All ministries must be prepared to accept the role of the lead ministry. The selection of the lead ministry is based on the principle of “most affected ministry” given the nature of the crisis, and the ministry that has best access to information and policy instruments for managing the crisis. The appointment of the lead ministry does not change constitutional responsibilities. The lead ministry is responsible for the regular coordination of crisis management at the ministerial level. In a crisis situation, the lead ministry shall:

- draw up coordinated situation reports.
- identify and assess the need for measures at the national level.
- handle necessary coordination with other ministries.
- ensure that coordinated information is given to the media and the population.

If there is uncertainty about which ministry is to coordinate crisis management, the prime minister in consultation with the relevant ministers will appoint the lead ministry in accordance with a recommendation from the Government Crisis Council. In such situations, the Ministry of Justice and the Police shall take the necessary initiative until something else is decided. With assistance from the Crisis Support Unit, the lead ministry will assume the secretariat function for the Government Crisis Council.

Ministry of Justice and the Police

The Ministry of Justice and the Police has a particular responsibility for coordinating the administration of work on safety, security and emergency planning in the civil sector in general. This includes responsibility for developing new national guidelines, making principal decisions regarding the Norwegian civil preparedness system, as well as administrative responsibility for the search and rescue service (SAR). However, each ministry is responsible for planning within its own sector. In most cases where central crisis management is necessary, the Ministry of Justice and the Police will be appointed lead ministry.

Directorate for Civil Protection and Emergency Planning (DSB)

In 2003, the government established the Directorate for Civil Protection and Emergency Planning consisting of the former Directorate for Civil Defence and Emergency Planning and the former Directorate for Fire and Electrical safety. The purpose was to create a basis for a wider range of expertise within the field of safety and security, and a common structure of authority from national to local level for the administration of fire, rescue and emergency planning. The directorate is the

executive body of the Ministry of Justice and Police with regard to civil emergency preparedness, and its formation is intended to result in more efficient use of resources and give the Ministry of Justice and the Police a more distinct role concerning the collective emergency and rescue services. The directorate's objective is to maintain a full overview of risk and vulnerability in society, promote measures that prevent accidents, crises and other emergencies, and ensure sufficient emergency planning and efficient management of accidents and crises.

Civil defence

The Civil Defence Organisation is an operative part of the DSB, and divided into 20 regional districts. 50,000 individuals serve in the Civil Defence Organisation, and about one third of these forces are ready to be utilised for peacetime emergencies. The DSB is responsible for the education and training of civil defence forces, which in peacetime are an important supplementary resource to the police and other emergency and rescue services, and regional and local authorities.

County governors

The county governors coordinate and supervise crisis emergency planning in their regions. The regional administration promotes emergency planning at the local level and participates in the planning of support of the military forces, as well as being responsible for environmental issues, agriculture and the inspection of municipal administrations. In a major crisis the county governor may also be responsible for crisis management coordination, and this authority increases greatly in times of war.

Municipalities

The municipalities are responsible for key societal services, and ensuring the continuation of these services during emergencies. This applies to local infrastructure, health services, care for the elderly and information to the public. The municipalities have primary responsibility for dealing with any peacetime emergency. Important tools in this respect are risk and vulnerability assessments and establishing local crisis management plans. All municipalities are required to have a fire service, and this is the municipality's primary resource for handling both fires and/or other types of emergency. Additionally, the municipalities are required by law to undertake civil emergency preparations for the health sector.

The police

The police are tasked with securing people, property, order, and public safety. It is the responsibility of the police to deal with accidents and incidents where life and health are at risk, and to ensure measures to avert danger and limit consequences. Crime prevention and investigation are also an important part of the societal safety and security work. Police reserve units may be used during major emergencies and disasters. Furthermore, the Police Directorate has an operative staff that may be established during major emergencies or acts of terrorism.

The rescue service

The Norwegian Search and Rescue (SAR) service maintains an integrated coordination structure, which means that each joint rescue coordination centre is prepared to handle land, sea or air

operations, rescue operations on offshore oil or gas installations, as well as operations requiring international cooperation. The collective SAR management at the two rescue coordination centres located in Bodø and Stavanger, and the rescue sub-centres lead and coordinate search and rescue operations within their respective areas. These centres consist of representatives from a number of government agencies who (together with the local chief of police who is in overall command) lead and coordinate search and rescue operations within their respective areas.

Military defence

The armed forces have the task, enshrined in the relevant laws and regulations and within the limits of their

competence and available resources, of providing support to society and the civil authorities in the event of major accidents, rescue operations, natural disasters and other situations posing a threat to life or health, or involving the risk of material damage. The armed forces must be capable of helping to prevent and counter possible assaults and attacks on the country's inhabitants, infrastructure and management functions. For instance, the armed forces conduct border guard activities along the Norwegian-Russian border in Finnmark. Armed forces units take part in search and rescue operations, and the Norwegian Coast Guard conducts maritime surveillance and control of Norwegian territorial waters and in the exclusive economic zone.

Voluntary organisations

Voluntary organisations provide important contributions during accidents at a local level, as well as emergency aid to other countries. Norway have nine voluntary rescue organisations on a national level, they are organised in "Frivillige Organisasjoners Redningsfaglige Forum" (FORF) (Voluntary organisations Rescue For a)

Den norska räddningstjänsten är lokalt förankrad och bygger till stor del på frivillighetsorganisationer. Norge har nio frivilliga räddningsorganisationer på nationell nivå som finns samlade i Frivillige Organisasjoners Redningsfaglige Forum (FORF).

These organisations are:

- Norges Røde Kors Hjelpekorps (Red Cross)
- Norsk Folkehjelp Sanitet (Medical assistance)
- Norske Redningshunder (Rescue dogs)
- Sjøredningskorpse til Redningsselskapet (Sea rescue)
- Rovernes Beredskapsstyrke (Home guard)
- Norske Alpine Redningsgrupper (Alpine rescue=
- Norsk Radio Ræle Liga (Radio support)
- Norsk Aeroklubb (Aeronautical support)
- Norsk Grotteforbund (Cave rescue)

In total these organisations has some 10 000 volunteers and in total some 500 local operative units. The majorities of the Norwegian municipalities (approx 350) host one or several of these organisations.

The local connection makes it possible for these organisations to function effectively in case of disruptions in the infrastructure such as road network and communications. The voluntary

organisations has some niche capabilities when come to operating in open terrain with good sustainability. This capability is often used when it comes to save life's.

Intelligence, counter-intelligence and security services

These services have responsibilities both in preparations against threats to important societal values and in relation to crisis management. Focus is on prevention against a broad spectrum of societal threats, and they consist of the Defence Intelligence Service, the Police Security Service and the National Security Agency.

The National Security Agency reports both to the Ministry of Defence, as its superior authority, in cases concerning military matters and to the Ministry of Justice and the Police, as its superior authority, in cases concerning the civil matters.

1.2.3 Civil military cooperation

Civil military cooperation in Norway is based on the Total Defence concept, which states that there will be a “total mobilisation of all possible civil and military resources to maintain the will to defend oneself, to offer the greatest possible resistance to aggression, to protect life and health, to maintain an organised society and to prevent damage caused by peacetime crises and/or war”. Greater emphasis is now being placed on armed forces support to civil communities. In crisis situations in peacetime, this support will normally take the form of supplementary assistance to the civil authorities when the crisis is of such a nature that the particular authority responsible for that sector is unable to manage the crisis on its own. The concept implies interdependence and close cooperation between civil preparedness and military defence. Civil preparedness measures may be used during peacetime in efforts to avoid or limit serious incidents when sufficient aid cannot be obtained from the ordinary aid organisations. In addition, civilian defence provides assistance to the police, fire brigades, health services and other public bodies and non-governmental organisations. Furthermore, in the case of a full military mobilisation the army will need substantial resources from civilian society, and it is therefore of vital importance that civilian society functions well in order to both supply the military and keep everything else running.

1.2.4 Monitoring and analytical support to policy making; R&D

DSB provides studies', auditing and guidelines along with the county boards. There is also for example FFI, Norwegian defence research institute.

1.3 Financing

1.3.1 Investing in preparedness

No aggregated sums have been identified since it is various authorities at local level that fund different sectors of preparedness. Some statistics at national level can be found at www.ssb.no

1.3.2 Investing in consequence management

For the private sector most have companies have insurance.

For the public sector the state pays when there has been a major rescue operation. All other sectors have to pay their own costs. The “polluter pays” is the fundamental rule.

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

Individuals get help from the municipality. POSOM groups (group that consists of representatives from various municipality sectors and other societal functions such as church) and other personal help are organised so that if need you get a temporary shelter. Voluntary organisations, like the Red Cross are also assisting.

1.4.2 Departmental Lessons Learned systems

The municipalities and county boards have a common organisation to share different experience.

1.4.3 Centralised (national) Lessons Learned system

There is no single centralised system. Every sector and agency has their own responsibility. SSB, Statistics Norway, is the national agency that collects statistics from a variety of sectors. Some sectors like Dangerous Goods have several agencies and actors that collect statistics and experiences. Below are some examples.

In the spectra of social and health care there is a national lessons learned system, both for the municipalities and Hospital areas.

To investigate major accidents DSB provides reports and recommendation to improve and provide opportunities for lessons learnt.

1.4.4 International exchange for Lessons Learned

Some examples:

DSB, together with other governmental agencies, arrange observation studies when they identify incidents of interest to learn from.

The Nordic countries have also ongoing cooperation in different areas. Nordred Agreement (www.nordred.org), HAGA declaration (named after castle) and Nordhels (www.nordhels.org) are some of them.

CTIF is an international organisation that has national sub-organisation. The purpose is to learn from each other and incidents that has append, from fire to hazardous materials. <http://ctif.org/>

1.4.5 Regular policy reviews

After every election there is a review of the Risk and vulnerability analysis. The level of ability is then reviewed and the new policies are set at the local level.

1.5 Resilience

Responsible for working with the protection of vital services and critical infrastructure rests in accordance with the principle of responsibility of each sector, as well as the owners and proprietors of businesses.

At the national level a national strategy and action plan for the protection of vital infrastructure as well as guidelines has been produced.

To ensure a structured approach to resilience implementation Norway has adopted standard NS-ISO 22301.

1.6 Information sharing and data protection

Personal information Law (PUL) and Inspire directive are implemented.

Each municipality has responsibility to ensure the safety of its citizens. The Social office, in the municipality is always involved when evacuation needs to be done.

Each sector is responsible to comply within the law, and secure that necessary information can be shared.

Each citizen has the right to know what kind of threats that normally exist within the municipality, like the risks for flooding or Seveso plants.

There is no national register of voluntary personnel. Every Voluntary organisation in itself has its own register of members.

One example is FORF, Non-Profit Organisations' Rescue Forum, which organizes several voluntary organisations.

Kriseinfo.no is a web site that gathers information on regular bases from different sites, regarding different warnings and information to the public about how to be prepared and find information.

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The foundation of CM manifested in the Norwegian law.

The responsibility principle

The person or organisation that is responsible for an activity under normal conditions is also responsible for such operations in an emergency situation.

The equality principle

Operations should, as far as possible, be organized in the same way during emergency situations as under normal conditions.

The proximity principle

Emergencies should be handled at the lowest possible level in society. On a central level the Government is the body responsible for this area, on the regional level it is the County Administrative Board and on the local level it is the municipalities.

In the different legislation rolling at all levels and sectors, the method to cope with a major incident is based on cooperation.

2.2 General crisis (emergency, disaster) management law²⁴²⁵

Legislation concerning Norwegian civil emergency planning may be divided into two pillars consisting of acts, prepared delegations of powers for law-making, regulations and directives. The first concerns the protection of the population in times of hostile acts and war, and the second relates to peacetime emergencies. The following acts provide the main framework for administrative operations in times of crisis/war:

- The War Act of 15 December 1950
- The Supplies Act of 14 December 1956, made valid for a peacetime crisis in 1974
- The Act on Civilian Defence of 17 July 1953. This act applies both in war and during peacetime, and is currently under revision.
- The Security Act of 20 March 1998
- The Act of Social and Health Preparedness of 23 June 2000

There is no overall legislation concerning civil protection in peacetime. Many government agencies and private organisations do however have civil protection tasks and are responsible for civil emergency planning, and every part of the administration must ensure that the necessary detailed emergency plans are put into effect. This is mainly regulated through laws and regulations concerning specific sectors.

The following legislation is important in this regard:

²⁴²⁵ http://ec.europa.eu/echo/files/civil_protection/vademecum/no/2-no-1.html#over

- Police Act of 4 August 1995,
- Fire Protection Act of 8 December 2000, implemented on 1 January 2001.
- The Fire and Explosion Prevention Act of 14 June 2002
- The Planning of Buildings Act of 14 June 1985, amended 24 November 2000
- Protection Against Pollution Act of 13 March 1981
- Regulation of 4 July 1980 on the main principles for the organisation of the Search and Rescue Services
- A new Act proposed on Municipal Responsibility for Sectorial Risk, Vulnerability Assessment and Emergency Plan, that was implemented 1 January 2010
-

2.3 Emergency rule

Municipalities' Rescue Services always have to have an incident commander. The incident commander has far reaching powers to engage people and resources that he/she need to handle the incident, but not without paying for it.

The Hospital area's representative in the health care authorities during a pandemic or for specified dangerous diseases also have far reaching powers, for example to isolate people.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

DSB is a national coordinator to help the municipalities and other actors to facilitate the management of the incident. Regarding legal arrangements and regulations see 2.2.

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

None

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

There is no specific legislation regarding NGO's involvement, but is on voluntary base, the "Frivillige Organisasjoners Redningsfaglige" Forum, forming a cooperation with nine major organisations.

2.7 Legal regulations for international co-operations

There is a number of different agreements that regulates the international co-operation, especially in the Nordic area. Norway also works actively within UN, NATO and EU. DSB is the focal point that co-

ordinates international co-operation. Within EU Norway is a partner of the European Union Civil Protection Mechanism.²⁴²⁶

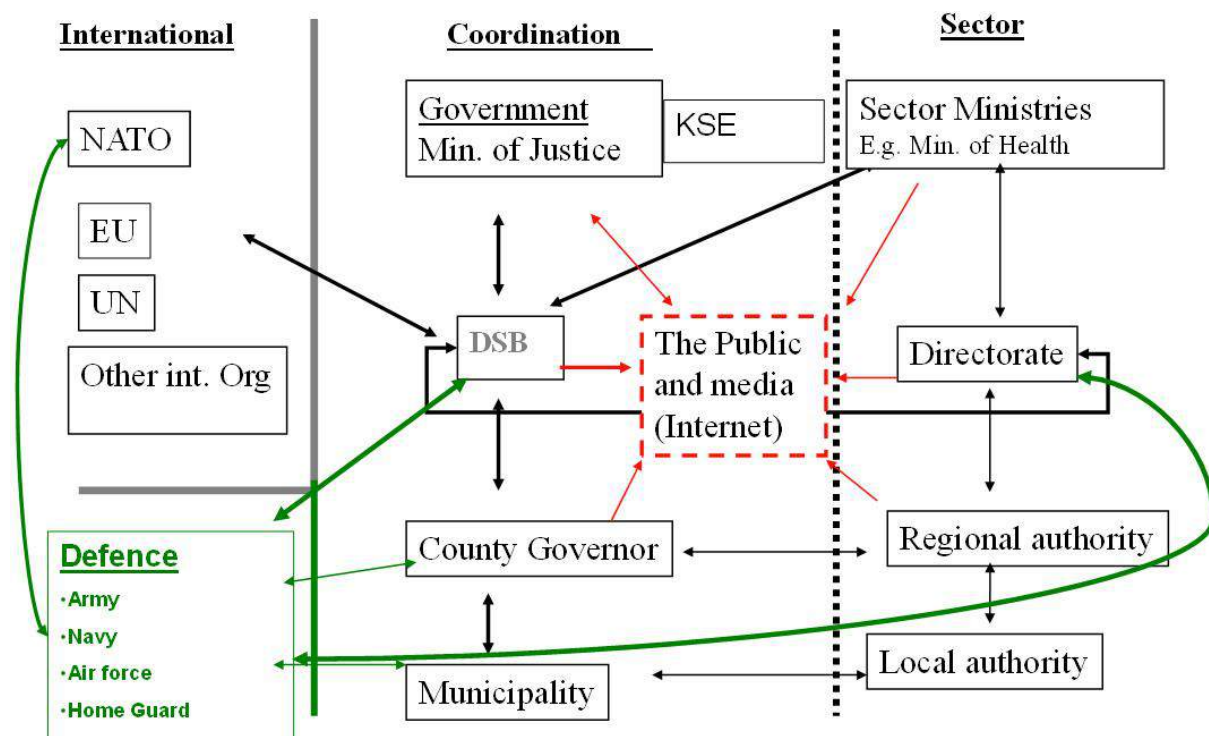


Figure 69: Principle lay out of Norway's international co-operation within crisis management

2.7.1 Nordred agreement

This is a framework for co-operation regarding rescue operations between the Nordic countries. It is meant to prevent accidents and reduce injuries to people, property and the environment. Participating countries are Denmark, Finland, Iceland, Sweden and Norway. The agreement's article 6 regulates the states obligations:

- Inform on new legislations and organisation within the rescue area
- Contribute to development and co-operation regarding rescue capabilities
- Ensure active contacts with necessary agencies and arrange meeting when necessary.

2.7.2 NORDEFCO-Nordic Defence Co-operation

The NORDEFCO-agreement is aiming at strengthen the countries defence capabilities, identify synergy effects in the defence area and to foster efficient solutions. Members are Sweden, Finland, Denmark, Iceland and Norway.

2.7.3 Haga declaration

Haga Declaration of 2009 aims to enhance the Nordic cooperation to prevent, reduce and manage the consequences of major accidents and disasters. The declaration covers the following areas:

- Rescue services
- Training and education

²⁴²⁶https://www.regjeringen.no/globalassets/departementene/fd/dokumenter/rapporter-og-regelverk/fd_stotte-samarbeid_web_april.pdf

- CBRN-Develop the capability to handle major accidents in this area
- Crisis communication to the general public
- Exchange experiences regarding volunteer organisations use in crisis management
- Research and development

2.7.4 Haga declaration II – a robust nordic region

This agreement from 2013 aims at even further developing the Nordic countries ability to prepare for and handle societal disruptions.

2.7.5 Nordic Medical agreement

This agreement aims at reinforce the ability to assist each other with medical assistance when the country's own resources is not enough.

3 Organisation

3.1 Organisational chart

A schematic skis of how a major rescue operation can be organised

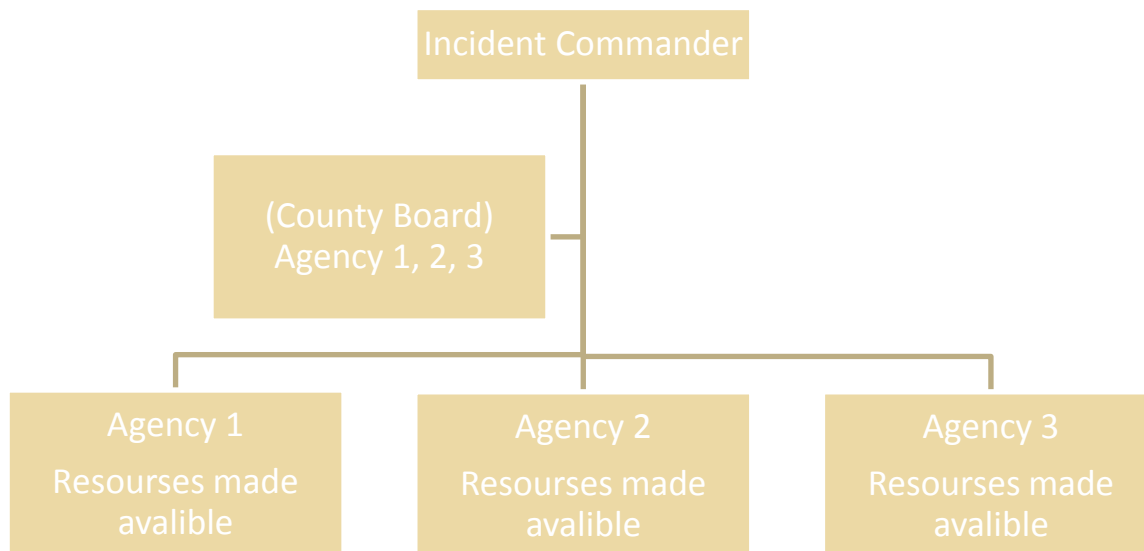


Figure 70: Organisation of a major rescue operation.

- National/ IO authority for emergency and disaster management; chain of command and high-level decision-making:
The incident commander is the commander during a rescue operation. The Commander can request more recourses and help. All tactical and operational decisions rest at the local level even when there is a crisis. The politicians may need to make funding available to handle the incident.
- Interdepartmental (inter-ministerial) emergency and disaster management authority:
The ministries have a group to keep them informed. DSB and other affected agencies inform the government on regular base during a major incident. They can make more resources available, if necessary.
- National permanent emergency and disaster management unit(s)/ formations; first responders:
There are no national First responders, except for:
Special police forces, mountain rescue, sea rescue, nuclear accident and maritime environment rescue operation.
- Planned/ anticipated use of specialised military assets:
Civil agencies and rescue service can ask for the recourses the military have. The local first responder's organisations may also have pre planned cooperation, and then the military, if they agree to help, is under the command of the incident commander.
- Departmental emergency and disaster management arrangements:

Each department need to have their own disaster management arrangement, including pre planned cooperation with others. It is each organisations own responsibility.

- Other national civil service organisations:

DSB is appointed to coordinate and encourage cooperation between national civil service organisations: special police forces, mountain rescue, sea rescue, nuclear accident and maritime environment rescue operation.

- Provincial (regional) authorities and arrangements for emergency and disaster management: County Boards, Hospital Areas and municipalities are obliging to plan. Local (municipal, town) authorities have arrangements for emergency and disaster management

- Volunteers and volunteer organisations; specialised NGOs:

Frivillige Organisasjoners Redningsfaglige” Forum organises voluntary organisations that have capacity to be engaged in search and rescue operations both on land at sea. They also have flying capacities to conduct visual reconnaissance.

- Private businesses:

Private businesses are obliged to protect themselves and their property. They are also obliged to prevent further damages, if possible.

In some sectors there are more regulations, transport of dangerous goods, Seveso plants, energy sector etc.

Below is a scheme showing key players and their relationships. The support is going towards the incident commander at the local level. The levels are not chain of command or a hierarchy; it is a way of describing local, regional and national agencies and their respective responsibilities.

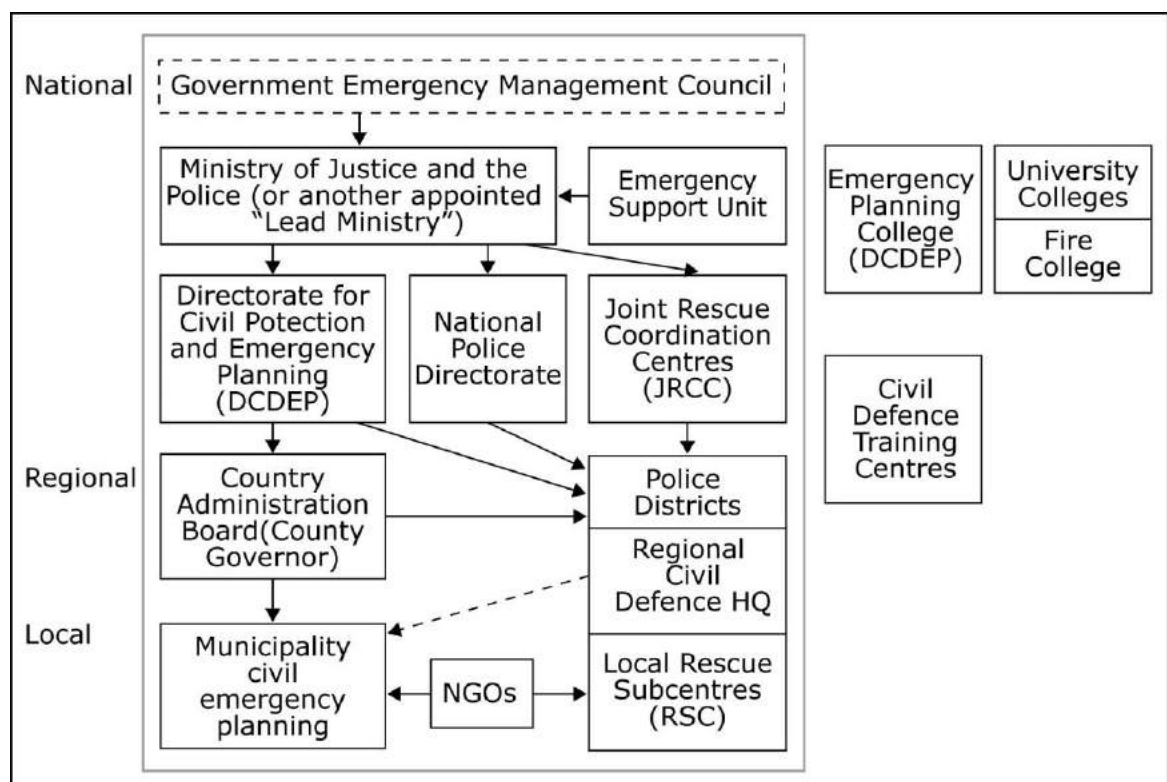


Figure 71: General lay out of how Norway organise its Crisis Management.

3.2 Organisational cooperation

- Operational cooperation (e.g., coordinated CM operations planning and response at national level, cross-border operational cooperation, operational cooperation within the EU)
 - *How priorities are assigned in the case of simultaneous occurrence of events?*
The municipalities prioritise, together with the incident commander, the resources. The County Board can support with prioritization of national and international recourses.
 - *How cross-border collaboration is organized?*
Under the Nordred agreement, municipalities on both sides of the border have local agreements. They have been authorised by the Nordic countries governments to sign agreements on cooperation in the aim of assisting each other, both in crises and during smaller incidents, like fires and traffic accidents.
- Cooperation and coordination in CM capability development (coordinated departmental CM capability planning, nationally centralized CM capability planning, multi-nation/ EU-level coordination of capability planning and capability development)

Cooperation is vital to handle all incidents. The incident commander is responsible to organise the cooperation and all parties are responsible to cooperate and make resources available for the incident commander. Every sector is responsible to handle their part of the incident.

Cooperation is a vital part of the legislation in the Nordic countries legislation. The Nordred agreement and Haga declaration means that there exists several on going cooperation, both at local, regional and national level. CM is a challenge due to the decentralised CM system. There is an ongoing exchange of experience and sharing of knowledge.

On EU-level DSB is represented in the Module group discussing mainly HNS, Host Nation Support, and the EU Civil Protection Mechanisms Voluntary Pool.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

Depending on the risk and responsibility each organisation has SOPs or not. There are guidelines and handbooks that DSB produce for the municipalities rescue service to use. Other sectors have their governmental agencies that produce handbooks and guidelines.

4.2 Operations planning

Depending on the risk and responsibility each organisation has its own operations planning. The auditing that the County Boards and DSB do of the plans for operation, highlight the organisations that do not meet a minimum level of safety that the public can expect.

4.3 Logistics support in crises

Depending on the outcome of the risk assessment and the organisations responsibility each organisation has to plan for their own needs of logistics support.

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

There are national procedures how to alert municipalities, county boards and central alarm system. Kriseinfo.no is a web site that gathers information on regular bases from different sites, regarding different warnings and information to the public about how to be prepared and find information.

5 Capabilities

5.1 Human resources

https://www.politi.no/nord_trondelag/redningstjeneste/Tema_920.xhtml

Civil defence has 8 000 men and women that are educated and exercised divided in to 20 districts.

5.2 Materiel (non-financial) resources

- What specific non-financial resources (dedicated equipment etc.) have been allocated to crisis management (central, regional, local preparedness and response)?
 - All sectors and levels have their own pre planning to handle an emergency.
 - DSB has helicopters that can be used in forest fires.
 - The energy sector has their recourses, like personnel on call.
- Permanent reserve stocks (fuel, food, medicines, tents, blankets, etc.)
 - Stock of medicines (Nationally funded)
 - Municipalities and County Council may have their own.
- Planned /anticipated/ involvement of specific military assets (e.g. reconnaissance assets, search and rescue helicopters, fire-fighting planes/helicopters, CBRN, etc.)
 - These assets exist among civil agencies like the Norwegian Coast Gard, Police, and Rescue Services.
- Incident commander during a rescue operation, can if deemed necessary mobilise or commandeer private assets during crises.

5.3 Training

- National, local and departmental exercises
 - DSB organises a table top crises management exercise every third year for national agencies.
 - Every County Board organise on regularly base table top exercise in their respective region.
 - Every municipality organise on regularly base table top exercise in their respective region.

<http://www.sivilforsvaret.no/Distrikter/Nord-Trondelag/Samvirke/LRS-aktiviteter/Ovingsutvalg-i-lokal-redningssentral-LRS/>
- Centralised specialist training
 - DSB organise training for UN, EU, Norwegian national, regional and local agencies.
- Training of volunteers and NGO personnel
 - FORF among other voluntary organisations organises training, with funding from DSB
- Cross-border and multinational training activities

-Barents Rescue is a major exercise between Sweden, Norway, Finland and Russia every third year. But there are many other exercises done every year.

- Is there a certification system? What standards are used to define specialists' training requirements?
 - Norway does not have a certification system for specialists training requirement. The employer may implement ISO standards if they find it appropriate.

Are there specialised training programmes for high-level decision makers?

- Courses are offered in crisis management and crisis information.
- Strategic Crisis Management, 5 meaning
- Civil Protection, Emergency Planning, and Civil and Military Cooperation, 5 ECTS

National training centres

National Emergency Planning College

The college is organised under DSB

Norway's fire academy <http://nbsk.no>

5.4 Procurement

5.4.1 Procurement regulation

- What needs to be procured? E.g. goods or services, including trainings?

Procurement regulation in the public sector is strict. Best value for many is the basic rule. Cooperation between the different agencies in the public sector is however encouraged
- Which EU directive on procurement is applicable on procurement of CM tools and related?

Are all articles of the directive applicable or are some articles not implemented?

-All articles are implemented and needs to be followed. If it is a sudden unexpected crisis you are allowed to buy what you need to handle the situation.

5.4.2 Procurement procedures

The public sector at all levels has their own procurement organisation that deals with procurements. A common web site www.anskaffelser.no is available for national an agency.

5.5 Niche capabilities

JRCC has flying capacities for sea rescue operations.

www.hovedredningssentralen.no/english/

Civil defence has resources, organised in to 20 districts.

The Norwegian Coast Guard

Resources

Legislative acts

The Police Act of 4 August 1995

The Fire Protection Act of 8 December 2000

The Fire and Explosion Prevention Act of 14 June 2002

The Planning of Building's Act of 14 June 1985, amended 24 November 2000

The Protection against Pollution Act of 13 March 1981

The Regulation of 4 July 1980 on the Main Principles of the Organisation of the Search and Rescue Services

The Act on Municipal Responsibility for Sectorial Risk, Vulnerability Assessment and Emergency Plan, 1 January 2010.

Other normative acts

Official documents (white papers, strategies, etc.)

There are a range of recommendations and handbooks in different areas to support the local and regional levels both private and public sector.

Some of them are collected at the websites below.

www.regelhjelp.no

<http://oppslagsverket.dsb.no/>

<http://www.beredskapsnett.no/>

Online resources (e.g. websites of key CM organizations)

www.dsb.no

www.politi.no

www.forf.no

www.nordhels.org

www.sivilforsvaret.no

www.Kriseinfo.no

Publications

There are a range of recommendations and handbooks in different areas to support the local and regional levels both private and public sector.

Some of them are collected at the websites below.

www.regelhjelp.no

<http://oppslagsverket.dsb.no/>

<http://www.beredskapsnett.no/>

Some examples:

Veiledning til forskrift om organisering og dimensjonering av brannvesen, DSB

Retningslinjer for varsling og rapportering på samordningskanal, DSB

Systematisk samfunnssikkerhetsog beredskapsarbeid i kommunene, en veileder fra Direktoratet for sivil beredskap

Expert interviews

Norwegian Directorate for Civil Protection, DSB



Driving Innovation in Crisis Management for **E**uropean **R**esilience

TURKEY

Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response

Responsible Partner: ECORYS (Laura Birkman, Rachel Beerman and Linette de Swart)



Scope and limitations

This study serves as supporting information for further work within DRIVER.

Only limited time and budget has been available for this first general survey, which needs to be considered in terms of scope and completeness of the respective studies.

The author/s of this study is/are responsible for its content and quality.

This report was revised at the end of 2015, reviewed internally by MSB and amended according to reviewer's comments and recommendations upon the decision of the author/s.

Overview

Turkey is prone to a range of complex emergencies – including both natural and manmade (industrial) disasters, due to its tectonic, seismic topographical and climactic structure. Turkey is subject to floods, landslides, avalanches, forest fires and, most importantly, earthquakes. In Turkey, the policy framework concerning natural disasters was conceived in the aftermath of the Erzincan Earthquake of 1939 with the "Measures and Assistances to Be Put into Effect Regarding Natural Disasters Affecting the Life of the General Public" no.7269 of 1959. The disaster management structure of Turkey underwent an important shift in 2009 with the establishment of the Disaster and Emergency Management Presidency (AFAD), the national level competent authority concerning disasters and emergencies. The AFAD Presidency undertakes the coordination function at the centre, while the responsibility for implementing the policies and operations lies with the provincial organisations – the Provincial Disaster and Emergency Directorates. AFAD is responsible for coordinating nearly all phases of disaster management including disaster risk reduction (DRR) at the national level, and installs rules, regulations, and guidelines for preparation of DRR plans at sub-national levels. The operating administrative level becomes higher as the extent and severity of disaster grows in scale and scope. While the reforms introduced in 2009 transferred significant responsibility for DRR and disaster response to the provincial and municipal levels, both of which now come under the responsibility of the province and district, this has not been implemented in practice. The system may therefore be termed both central and decentralized but is coordinated from central bodies and functions through AFAD. The state has no legal responsibility to fund the costs for national investments in preparedness, whereas investments in consequence management come directly from the AFAD budget (response and relief) and the national compulsory earthquake insurance scheme. Niche crisis management capabilities include campsite construction and canine-assisted search and rescue for earthquakes and avalanches.

Table of Contents

TURKEY Policy, Legislation, Organisation, Procedures & Capabilities (PLOPC) in crisis management and disaster response	1813
Overview	1814
Table of Contents	1815
List of Figures	1817
List of Tables.....	1817
List of Abbreviations.....	1818
1 Policy	1820
1.1 Risk Assessment.....	1820
1.1.1 Key Risk Areas	1820
1.1.2 Risk assessment mechanism and procedures	1822
1.2 Policy and Governance	1823
1.2.1 Strategy scope and focus	1824
1.2.2 Monitoring and analytical support to policy making; R&D	1826
1.2.3 Policy for Prevention	1828
1.2.4 Policy for Preparedness	1828
1.2.5 Policy for Response	1829
1.2.6 Policy for Relief and Recovery	1830
1.3 Financing	1831
1.3.1 Investing in preparedness	1831
1.3.2 Investing in consequence management	1832
1.4 Policy review, Evaluation & Organisational Learning	1833
1.4.1 Post-Disaster Assessment	1833
1.4.2 Departmental Lessons Learned systems	1834
1.4.3 Centralised (national) Lessons Learned system	1834
1.4.4 International exchange for Lessons Learned	1834
1.4.5 Regular policy reviews	1834
1.5 Resilience	1834
1.6 Information sharing and data protection	1835
2 Legislation	1836
2.1 Crisis (emergency, disaster) management concept.....	1836
2.2 General crisis (emergency, disaster) management law.....	1836

2.3	Emergency rule	1839
2.4	Specific, department/agency-level legal arrangements and regulations on emergency and disaster management	1839
2.5	Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management	1840
2.6	Legal regulations on the involvement of volunteers and specialised NGOs	1841
2.7	Legal regulations for international engagements of first responders and crisis managers	1841
3	Organisation	1842
3.1	Organisational chart	1842
3.1.1	National level authorities and organisations	1843
3.1.2	Provincial level organisations	1850
3.1.3	Municipal level authority and organisations	1852
3.2	Organisational cooperation	1853
4	Procedures	1855
4.1	Standing Operating Procedures (SOPs) and Guidelines	1855
4.2	Operations planning	1855
4.3	Logistics support in crises	1858
4.4	Crisis communication to general public; Alert system; Public Information and Warnings	1858
5	Capabilities	1861
5.1	Human resources	1861
5.2	Materiel (non-financial) resources	1863
5.3	Training	1864
5.4	Procurement	1865
5.4.1	Procurement regulation	1865
5.4.2	Procurement procedures	1867
5.5	Niche capabilities	1867
	Resources	1868
	Legislative acts	1868
	Other normative acts	1869
	Official documents (white papers, strategies, etc.)	1869
	Online resources (e.g. websites of key CM organizations)	1870
	Publications	1871
	Expert interviews	1872

List of Figures

<i>Figure 1: Distribution of natural disasters in Turkey, 1985-2014.....</i>	<i>1821</i>
<i>Figure 2: Mechanisms for DRR in Turkey.....</i>	<i>1826</i>
<i>Figure 3: Current financial structure of disaster management in Turkey.....</i>	<i>1833</i>
<i>Figure 4: Organisational Management of Disaster and Emergency Management in Turkey</i>	<i>1842</i>
<i>Figure 5: Crisis Management Cycle</i>	<i>1843</i>
<i>Figure 6: Organisational Chart of the Disaster and Emergency Management Presidency (AFAD)</i>	<i>1845</i>
<i>Figure 7: Working Groups under the Central Level Departments of the CM authority</i>	<i>1846</i>
<i>Figure 8: AFAD Disaster and Emergency High level boards/committees</i>	<i>1848</i>
<i>Figure 9: Example Organisational Chart of Provincial Directorate for Disaster and Emergency Management of Bursa Province</i>	<i>1852</i>
<i>Figure 10: Intelligence and Dissemination System</i>	<i>1859</i>
<i>Figure 11: Equipment in use for data communication and warnings and other products dissemination.....</i>	<i>1860</i>
<i>Figure 12: General Personnel Status of the Presidency.....</i>	<i>1861</i>
<i>Figure 13: Distribution of Permanent Personnel as per Service Classes.....</i>	<i>1861</i>

List of Tables

<i>Table 1. Summary of Natural Disaster, human impact and economic damage.....</i>	<i>1820</i>
<i>Table 2. Integrated Disaster Management Cycle: Actualizing the integrated disaster management system ..</i>	<i>1825</i>
<i>Table 3. Relevant legislation, Laws</i>	<i>1837</i>

List of Abbreviations

ADM	Disaster and Emergency Management Directorate
AFAD	Disaster and Emergency Management Presidency
AFAYBIS	Disaster Emergency Management Information System project
AFEM	European Natural Disaster Training Centre
AKOM	Istanbul Metropolitan Municipality Disaster Coordination Center
AKUT	Search and Rescue Team
BSEC	Black Sea Economic Cooperation Organisation
BU	Bosphorus University (BÜ)
DAK	Natural Disasters Search and Rescue Battalion
DMI	Turkish State Meteorological Service
DPRoT	Turkey Disaster Response Plan
DSI	Turkish State Hydraulics Works
EIE	General Directorate of Electrical Power Resources Survey and Development Administration
EAB	Earthquake Advisory Board
İDMP	Earthquake Master Plan of Istanbul (İBB)-
İMM	Istanbul Metropolitan Municipality
İSMEP	Istanbul Seismic Risk Mitigation and Emergency Preparedness Project
JICA	Japan International Co-operation Agency
KIZILAY	Turkish Red Crescent Society
KOERI	BU Kandilli Observatory and Earthquake Research Institute
MEF	Ministry of Environment and Forest
METU	Middle East Technical University (ODTÜ)
MoH	Ministry of Health
Mol	Ministry of the Interior
MPWS	Ministry of Public Works and Settlements
NCIP	The National Catastrophic Insurance Program
NDV	Neighborhood Disaster Volunteer
NESAP	National Earthquake Strategy and Action Plan
NGO	Non Governmental Organization
SAR	Search and Rescue

TABB	Turkish Disaster Databank
TABIS	Turkey Disaster Information System
TAGEM	General Directorate of Agricultural Research
TCIP	Turkish Compulsory Insurance Pool
TDV	Earthquake Foundation of Turkey
TEMAD	Turkey Emergency Management General Directorate (TAY)
TUBITAK	Turkish Scientific and Technical Research Institute
TUGEM	General Directorate of Agricultural Production and Development
UDAP	National Earthquake Investigation Programme
UN-OCHA	The United Nations Office for the Coordination of Humanitarian Affairs
UNDP	United Nations Development Program
WMO	World Meteorological Organization

1 Policy

The Crisis Management and related²⁴²⁷ Policy is designed to effectively coordinate the use of national and community, public and private resources, as well as those provided through international co-operation, to protect life and property before, during and immediately following a major crisis triggered by natural disasters or man-made catastrophes. It is placed into operation whenever an emergency affecting the country, regions or locals cannot be controlled through routine, daily and normal channels and procedures.

1.1 Risk Assessment

1.1.1 Key Risk Areas

Turkey is prone to a range of complex emergencies – including both natural and manmade (industrial) disasters, in particular, floods, landslides, avalanches, forest fires and, most importantly, earthquakes, due to its tectonic, seismic topographical and climactic structure. Table 47 summarises the record of natural disasters, including their human and economic impact in Turkey during the last 30 years. Table 1 shows the percentage breakdown of these natural disasters.

Table 47. Summary of Natural Disaster, human impact and economic damage.

Type of disaster	No. Events	No. Killed	Total affected (4)	Damage (000 USD)
Earthquake (seismic activity)	35	19841 (566.9)	4387715	\$24,509,800
Epidemic (1)	3	35	380	-
Extreme Temperature (2)	7	100	8450	\$1000 (5)
Flood	29	508	1715320	\$2,180,500
Mass movement dry	1	261	1069	-
Mass movement wet (3)	9	332	13487	\$26,000
Storm	7	70	1639	-
Wildfire	5	15	1150	-
(1) Include Bacterial and Viral Infections diseases (2) Includes cold waves, heat waves and extreme winter conditions (3) Includes avalanches and landslides (4) Refers to Sum of injured, homeless, and affected (People requiring immediate assistance during a period of emergency; it can also include displaced or evacuated people). (5) Amount includes only heat waves.				

Source: EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be - Université catholique de Louvain - Brussels – Belgium.

²⁴²⁷ E.g. in Germany the responsibility for crises of different types is defined by the “Grundgesetz” (German Constitution).

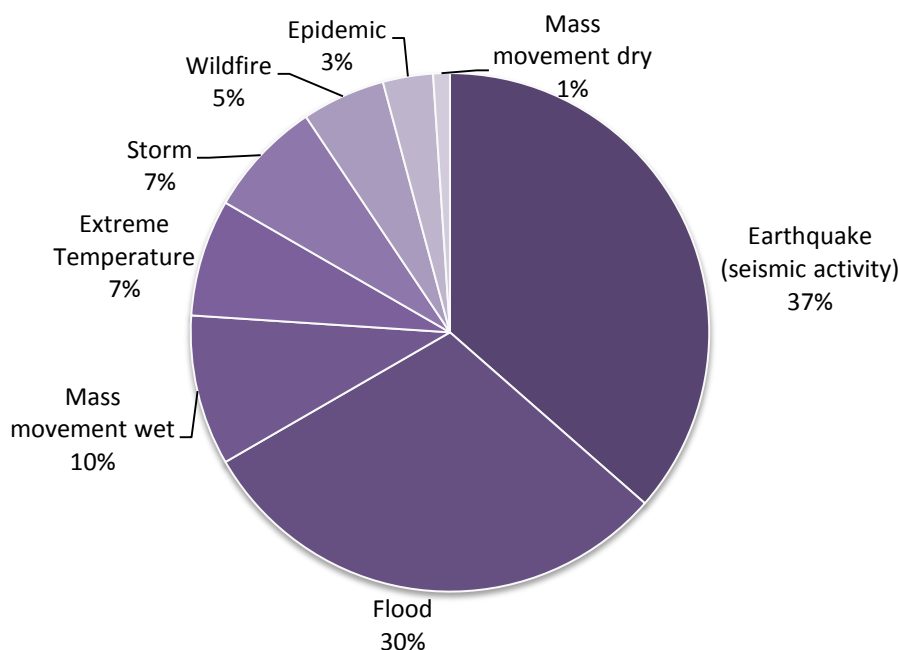


Figure 72: Distribution of natural disasters in Turkey, 1985-2014²⁴²⁸

Earthquakes have, by far, the greatest impact to the population and infrastructure of Turkey. Turkey ranks third in terms of human losses resulting from earthquakes, and eighth in terms of the number of individuals impacted by earthquakes (AFAD Earthquake Department Database).

On average, Turkey experiences at least one earthquake each year with a magnitude between 5 and 6. The majority of the population (70%) lives in seismically active, earthquake-prone areas, where major economic investments and significant vital infrastructure (75% of the country's industrial plants) and related construction take place (AFAD, 2013). Economic losses caused by natural disasters, either directly or indirectly, underscore the necessity of effective disaster management in Turkey.

Turkey is also prone to floods, which are the most frequent and costly natural disasters in Turkey in terms of human impact and economic loss. According to the historical flood database, 4,067 flood occurrences in Turkey have been recorded between 1955 and 2009, causing 1,400 deaths and serious damage to 30,800 dwelling units. Landslides, rock-falls and avalanches have also caused significant human and economic loss during the last 50 years. From 1955 to 2009, landslides affected 5,472 settlements and killed 200 people. In this period 68,300 dwelling units were relocated to safer places. Landslides frequently affect inner and eastern Anatolia, and particularly the Black Sea regions in Turkey. According to AFAD data in 2013, 25% of the country is exposed to landslide hazards, with 11% of the population located in landslide areas. Finally, extreme winter conditions, cold waves and heat waves have affected thousands of people and killed several hundred during the years. The direct economic losses of such weather conditions (heat waves) are not taken into account in the EM-dat database (WMO, 2012; AFAD website).

²⁴²⁸ EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be - Université catholique de Louvain - Brussels - Belgium

1.1.2 Risk assessment mechanism and procedures

The Disaster and Emergency Management Presidency (AFAD), the national level competent authority concerning disasters and emergencies, is responsible for preparing multi-hazard assessments, including maps and micro-zoning mapping studies, which are then developed at the regional level and in particular for urban areas. The government has invested significant resources in a number of projects aimed at determining the natural and man-made risks that threaten the country and on how to manage them. An important step in this regard occurred with the establishment of the Turkish Disaster Data Bank in 2014. The Turkish Disaster Data Bank project, conducted by the Middle East Technical University (METU) Disaster Management Centre and AFAD, aggregates data on historical risks to demonstrate the nation's vulnerabilities in order to identify strategic priorities for future risk mitigation. A second important project, the Disaster Risk Modelling project, was launched in early 2014. This project will use mathematical models to perform predictions of probable disasters.²⁴²⁹ AFAD uses the data collected to determine the country-level strategy for disaster and emergency situations.

Numerous risk assessments exist, however they focus primarily on geophysical hazards - and generally limited to earthquakes - and on the Marmara region. Flood hazard maps have only been prepared for West Black Sea Region based on the floods of 2010. These maps were produced by Turkish State Hydraulics Works (DSI). A major limitation is therefore the fact that no national level multi-hazard risk assessments have been developed to date with a common methodology available to inform planning and development. According to current legislation and strategic planning, AFAD has commenced efforts towards the development of the definition of risk assessment standards for the full spectrum of disasters. AFAD is tasked with developing risk assessment guidelines for local governments and providing technical support to local authorities to carry out risk assessments in their jurisdiction. These local risk assessments are then provided to AFAD by the local governments that have launched risk assessment studies at the local level. AFAD has acquired technical capacities in GIS and databases development and management (Department of Data Processing) (WMO, 2012)

The following hazard maps and risk scenarios were available as of 2011:

- The National Seismic Zoning Map of Turkey (Earthquake Research Department).
- Earthquake Prediction Models (Laboratory Division of the Earthquake Research Department, developed with the support of Germany).
- GIS for assessing the potential extent of floods and the scope of earthquake related damage based on fully digitalised nationwide geological maps (General Directorate for Mineral Research and Exploration).
- Hydrometeorological hazard risk maps, which are not systematically produced over the entire country but developed by the Turkish State Meteorological Services (DMI) and Turkish State Hydraulics Works (DSI) when requested by a community.
- Forest fire susceptibility maps at the national level (General Directorate of Forestry).

²⁴²⁹ Statement by H.E. Ambassador Mehmet Ferden Cariki, Permanent Representative of the Republic of Turkey to the UN Office at Geneva and Other International Organisations in Switzerland (2014). First Preparatory Committee of the 3rd World Conference on Disaster Risk Reduction, 14-15 July 2014, Geneva.

- Maps showing the distribution of landslides, rock falls and snow avalanches affecting residential areas at the national level (UNDP/WMO, 2011).

Risk assessments with higher resolution are limited to the Greater Municipality owing to the high seismic risk in Istanbul (i.e., the disaster risk reduction (DRR) plan of the Istanbul Metropolitan Municipality (IMM)).

The following databases are available, which are important for characterizing the earthquake risk. They contain geological, geotechnical and structural engineering data provided by GIS systems and are used in order to carry out a detailed mitigation study:

- **Earthquake Source Database:** Identifies the seismic sources, characterized by their geometry, maximum magnitude, recurrence relationship, and attenuation from source to site, that define the earthquake threat for the region (e.g. Istanbul). Data may include probability of rupture on a fault segment conditional based on the timing of previous ruptures thus providing time-dependent hazard estimates.
- **Geotechnical Hazard Database:** Comprises a soil classification scheme and site characteristics, including the potential for liquefaction, landslide, and fault rupture in the study region.
- **Vulnerability Database:** Defines the engineering principles that relate ground motion characteristics and damage ratio for different types of structures in the study region. (UNDP/WMO, 2011)

AFAD has access to two different databases for flood-related hazards.

- **Turkey National Disaster Archive Project (TUAA):** Developed by the former General Directorate of Disaster Affairs, TUAA is the National Disaster Inventory System. This database includes (i) date and place of the event, (ii) affected area, (iii) affected buildings, and (iv) affected people (number of dead, number of injured people).
- An archive of the data collected in collaboration with the DSI since 2009.²⁴³⁰ Since 2011, AFAD and DSI have been working together to develop a systematic approach to flood data collection and hazard mapping. AFAD uses this data to determine the country-level strategy for disaster and emergency situations.

1.2 Policy and Governance

On 16 December 2009, the new department called “Disaster and Emergency Management Presidency” (AFAD) was established under the Prime Ministry by Law No. 5902. to take necessary measures for an effective emergency management and civil protection issues Turkish nationwide. AFAD is authorized to act in all disasters and emergencies situations in the country. It has the mandate to produce and implement policies on: (i) pre-incident: preparation, mitigation and risk

²⁴³⁰ For more information on hazard analysis and mapping for hydrometeorological risk assessment, see WMO (2012), “Meteorological, Hydrological and Climate Services to Support Disaster Risk Reduction and Early Warning Systems in Turkey.” In *Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs*, 211-212.

management before the occurrence of events, (ii) during incident: response during the event, (iii) post-incident: recovery and reconstruction after the event, and (iv) and for the effective implementation of these activities across the country.

1.2.1 Strategy scope and focus

Since the early 1960's, Turkey had in place a range of regulations and implementation arrangements concerning disaster and crisis management which referred to all phases of the disaster and crisis management cycle, however disaster and emergency management policies have been more reactionary in nature, resulting in a strategy focused on the response and the recovery and rehabilitation phases, rather than prevention and reduction of disaster risks. The experience of the 1999 Marmara Earthquakes made clear the insufficiency of existing arrangements. Since then, the focus has begun to shift to risk mitigation and prevention.

The **AFAD Strategic Plan 2013-2017**, adopted in 2013, introduced a new disaster management model in Turkey, shifting the priority from “Crisis Management” to “Risk Management”. The new model, today called the “Integrated Disaster Management System”,

*provides for identification of hazards and risks in advance to mitigate the losses caused by disasters and emergencies, taking measures to prevent or minimize possible losses before the disaster takes place, ensuring effective response and coordination, and carrying out post-disaster recovery works in an integrated manner.*²⁴³¹

The integrated disaster management system consists of 4 axes: **Mitigation, Preparedness, Response, and Recovery**. The activities and outputs for each of the axes are presented in table 2

²⁴³¹ AFAD website, accessed 25 September 2014.

Table 48. Integrated Disaster Management Cycle: Actualizing the integrated disaster management system

Mitigation axis...	Preparedness axis...
<p>Covers activities oriented to reduce or eliminate the likelihood of loss or lessen its intensity through risk evaluations. Under this axis raising public awareness on disaster risk, developing organizational structures and legislation implemented before and after disasters, and developing research and development policies and strategies in line with needs and priorities are actions covered. In this framework, the following outputs constitute the basis of mitigation activities:</p> <ul style="list-style-type: none"> • Risk management and mitigation plans based on disaster and emergency studies implemented at country level, • National Disaster Management Strategy and Action Plan, • Determination of possible disaster and emergency regions and announcement of preventive measures, • Plans, projects and zoning principles for areas likely to suffer damages, • Information and evaluation reports on disasters and emergencies taking place in the country and abroad, • Principles of in-kind, in-cash and humanitarian aid, • International exchange of information, • Arrangements oriented to inform, educate and raise awareness of the public on disasters and emergencies, and • Standards of disaster and emergency services 	<p>Implicates the preparation and training activities for intervention in disasters through coordination of people and institutions. In this phase AFAD's purpose is to ensure full scale preparedness against disasters. In this framework, the following outputs constitute the basis of disaster preparedness activities:</p> <ul style="list-style-type: none"> • Arrangements oriented to inform, educate and raise awareness of the public on disasters and emergencies, • Emergency aid and logistic service plans, • Disaster and emergency plans for miscellaneous groups, • Information, communication, forecasting and early warning systems, • Resource management system, • Risk maps, • Research and development activities, • Training of response teams, • Exercises concerning disasters, • International cooperation, • Generalizing insurance services, • Ensuring conformity of NGOs to disaster-related service standards, and • Ensuring conformity to standards of disaster and emergency management centres' common communication and information systems
Response	Recovery
<p>Covers the activities to determine and meet all necessities that may arise as a result of disasters and emergencies, as fast as possible. In this framework, the following services are crucial in ensuring coordination and effective job distribution by AFAD for quick delivery:</p> <ul style="list-style-type: none"> • Communication • Transportation, • Protection from fire and hazardous substances, • Search and rescue, • Safety and traffic, • Health and sanitation, • Damage assessment, • Infrastructure reparation, • Safety of food, agriculture and animal, • Emergency shelter, • Nutrition, • Interment, • Debris removal, • Social support, • Logistics and maintenance, • Information management, and • Emergency aid funding 	<p>Covers activities to normalize and, if possible, further improvement of all life systems that have been disrupted due to disaster or emergency, in the fastest and most accurate way. In this framework, the following outputs and services are essential in ensuring return to normal social life and increasing disaster resilience:</p> <ul style="list-style-type: none"> • Measures to normalize life after disaster and emergency, • Safe site selection, • Disaster housing, • Credit to those building their homes, • Zoning, planning and project arrangements for disaster prone locations • Post-disaster safe re-building

Source: AFAD Strategic Plan 2013-2017

In addition to the AFAD Strategic Plan, the Presidency has developed and begun implementation of three additional national strategic and action plans (all of which are inter-related with the AFAD Strategic Plan). These plans are:

- National Earthquake Strategy and Action Plan (2013-2023)

- National Climate Change Strategy / National Climate Change Action Plan (2011-2023)
- Turkey Disaster Response Plan

Mechanism For DRR in TURKEY



Figure 73: Mechanisms for DRR in Turkey²⁴³²

Together, these plans build Turkey's road map until 2023.²⁴³³ AFAD's Recovery department has drafted a National Recovery Plan that is waiting to be confirmed as of *National Progress Report on the implementation of the Hyogo Framework for Action (HFA) (2011-2013)* (see AFAD, 2013b). The plans are described in greater detail in 4.2.

1.2.2 Monitoring and analytical support to policy making; R&D

The AFAD Strategic Plan 2013-2017 identifies monitoring of disaster losses and hazards, and related R&D as critical to its approach to disaster risk reduction. The provincial directorates can develop project plans and submit them to the Ministry of Development for Projects, but the Presidency is the main responsible body for the development of Projects. According to the Plan, AFAD fulfils its duties in this regard by:

- Collecting necessary basic data on disaster risks and developing the necessary planning tools in order to monitor the relationship between the development policy and disaster risk,

²⁴³² AFAD (2014) Presentation at the 5th International Disaster and Risk Conference IDRC 2014, 24-28 August 2014, Davos, Switzerland.

²⁴³³ Statement by the Ambassador M.F. Cariki to the UN, July 2014.

- Collecting and disseminating data required for making timely and effective development plans and policies to reduce disaster risk,
- Re-orienting disaster risk reduction sectors, mobilizing and warning the public.

At the national level, Turkey has in place a number of systems for systematically reporting, monitoring and analysing disaster losses and hazards: the National Earthquake Observation Network, operated by AFAD, produces data that is stored within the National Earthquake Data Center's database and shared with the public; The Flash Flood Early Warning Project, which covers 6 countries (Turkey, Azerbaijan, Armenia, Georgia, Bulgaria and Syria) in the Black Sea and the Middle East is being conducted in cooperation with the World Meteorology Organization (WMO) and the American Hydrology Research Centre (HRC). The output is the Flash Flood Early Warning System test products; Finally, fires are monitored by the Fire Operations Centre.

In 2012, Turkey initiated a National Earthquake Investigation Programme (UDAP). With this programme, AFAD will fund earthquake investigation projects of universities and governmental institutions between 2012 and 2023.²⁴³⁴ The Annual budget for 2012 was set at 1.000.000 USD, and will increase annually. The budgets for 2013 and 2014 were 1.076.000, 1.654.000, respectively; and the budget for 2015 is set at 1.815.000 USD. In addition to this, international financial resources have been provided by World Bank, EU, JICA and Islamic Development Bank, etc. to be used in the DRR projects.

A number of universities, particularly Karadeniz Technical University, were involved in more than thirty research projects and studies between 2011 and 2013 on reducing the disaster risks. One such project is the Disaster Emergency Management Information System (AFAYBIS) project that is being carried out by YTU. The AFAYBIS project aims to support both disaster management and e-Government studies in Turkey. During the analysis stage of the project, approximately 50 institutions related to disaster management are under examination (AFAD, 2013b).

At the local level, research studies have been carried out in, e.g. Istanbul which provide estimated risk parameters to the population, buildings, transportation systems, and lifelines. Parameters have also been developed to estimate the potential impact of risks on essential facilities, services and emergency response. Inventory data on urban elements at risk have been obtained from a range of sources, including from relevant state/public institutions, private companies, specific studies and from satellite imagery, and are used in the following projects and studies:

- Disaster Prevention / Mitigation Basic Plan in Istanbul including Seismic Microzonation in the Republic of Turkey – (JICA – IMM).
- Earthquake Risk Assessment for Istanbul Metropolitan Area – Bogazici University (supported by the American Red Cross) (BU – ARC).
- Earthquake Risk Assessment for Industrial Facilities in Istanbul – Bogazici University (supported by Munich-Re Group)

²⁴³⁴ Regarding the UDAP program, 6 projects (implemented by academics) had already been launched by the end of 2012.

- Turkish Improvement of Natural Hazard Insurance and Disaster Funding Strategy (TEFER) Project – Turkish Treasury (supported by the World Bank and conducted by Cordis-Willis with the assistance of CAR and Bogazici University). (AFAD, 2013b)

1.2.3 Policy for Prevention

Specific policies distinguished by prevention, preparedness, response, relief and recovery could not be identified in the framework of this study.

Notwithstanding the lack of clarity on the policy for prevention, several relevant players can be identified.

- The Earthquake Engineering Division established within AFAD is responsible for the development of building codes and standards for construction in disaster prone areas, aimed at increased resistance to earthquakes.
- The Ministry of Public Works and Settlement (MPWS) is another key actor in this phase, responsible for the monitoring of the aforementioned building codes (together with the municipalities). The MPWS is also responsible for retrofitting of large scale bridges.
- Implementation of the building code policies is done by the local, district and provincial governments.
- Local governments are tasked with enforcing building codes and related urban development and planning standards within their jurisdiction. Outside the municipal boundaries, however, enforcement and implementation of building codes and standards is left to provincial and district governments.
- The MEF, through the DSI and DMI, is tasked with the protection of surface and underground water, sea and land environments and the prevention of pollution. (UNDP/WMO, 2011)

1.2.4 Policy for Preparedness

Specific policies distinguished by prevention, preparedness, response, relief and recovery could not be identified in the framework of this study.

At the central level, the Department of Planning and Mitigation at AFAD is responsible for all coordination aspects of preparedness; In the event of an earthquake, Department of Earthquakes is also involved. The main tasks/responsibilities of the department of Planning and Mitigation include:

- To prepare disaster and emergency response, risk management and hazard reduction plans, which will be applied nation wide.
- To determine possible disaster and emergency areas and to pronounce preventive measures.
- To determine reconstruction, plan and project rudiments of disaster prone areas.
- To determine cash, goods and humanitarian aid rules.
- To work for informing and raising awareness of public about disasters and emergencies.
- To collect and evaluate information about disasters and emergencies occurred inside and abroad.
- To determine standards of common communication and data systems in Disaster and Emergency Management Centres and inspect them.

- To carry out the routine works of Disaster and Emergency Training Centre related to Disaster and Emergencies.
- To execute other tasks given by Director General.
- To determine administrative strategies.
- To establish and operate all kinds of communication, early warning, data and prediction centres.
- To suggest to related agencies about public investments and personnel requirements.
- To ensure improvements and generalize insurance services.
- To determine and supervise service and accreditation standards. [AFAD website]

The most important organisational bodies involved in the development and implementation of disaster preparedness in Turkey are the provincial and district governments.

Two other organisations play a role in disaster preparedness. These are the Turkish Red Crescent Society (TRCS) and the Turkish armed forces. The former formulates Disaster Preparedness and Intervention Plans at the national, provincial and local levels, while the latter develop their own Military Emergency Assistance Plans in coordination with the provincial and local governments. The plans reviewed and revised annually and approved by the Land Forces Command (Ganapati, 2008).

1.2.5 Policy for Response

Specific policies distinguished by prevention, preparedness, response, relief and recovery could not be identified in the framework of this study.

Tasks, mandates and responsibilities concerning response are ascribed to AFAD under Law N. 5902 and specified according to Law N.7269 Article 4. At the central level, AFAD's Department of Response is the responsible entity for the coordination of all disaster response activities. In the event of an earthquake, the Department of Earthquakes is also involved. The main responsibilities ascribed to the Department of Response of AFAD include:

- During the disaster and emergency situations: to carry out works to resolve the effects of disaster and emergency situations by evaluating the any source belong to public, private and NGO, foreigners and organizations;
 - To manage Prime Ministry Disaster and Emergency Situations Centre;
 - To ensure the establishment and management of emergency management centres at governmental agencies and in provinces;
 - To define the standards of Fire Brigade and SAR Teams and to cooperate with the agencies and institutions providing these services;
 - To plan and conduct protective and rescuer activities;
 - To conduct missions given by the agreements related to disaster and emergency situations;
 - To co-operate with the International Agencies and Foreign Governments in its own field.
- [AFAD website]

At the provincial level, the provincial directorate is the lead organisation responsible for response operations. The directorate is tied to the Governorate and has the right to ask for the participation of all other public institutions in the province. The key organisational units involved in response operations are the provincial and district (municipal) governments through the implementation of the disaster response plans by the Provincial and District Rescue and Aid Committees (RAC) (described in section 3.1.2).

Municipalities are also involved at the level of implementation; municipal bodies are not involved in the policy development, but rather through the provision of equipment and staff in the event of a crisis. In practice, a high level secretary of the deputy mayorship is invited to the provincial directorate and may contribute to coordination of the municipal team. (Ganapati, 2008).

In addition to the central and local governments, the Turkish Red Crescent Society is involved in response and rescue activities (see section 5.2).

1.2.6 Policy for Relief and Recovery

Specific policies distinguished by prevention, preparedness, response, relief and recovery could not be identified in the framework of this study.

Tasks, mandates and responsibilities concerning rehabilitation and reconstruction are ascribed to AFAD under Law N. 5902 and specified according to Law N.7269 Article 4. The Recovery approach in Turkey focuses not only on reconstruction of damaged buildings, but also it engages in an integrated approach that covers the disaster area as a whole, including infrastructure, schools, hospitals, road, parks and physical and social environments. The recovery activities incorporate risk reduction measures for a resilient recovery and aim to reduce necessary recovery activities in the future through strengthening infrastructure and retrofitting (UNDP/WMO, 2011).

At the central level, AFAD's Department of Recovery is the lead entity responsible for the coordination of relief and recovery operations. The main tasks/responsibilities ascribed to the Department of Recovery include:

- To take necessary measures for normalising life after disaster and emergency situations;
- To assure temporary settlement at disaster and emergency areas and to provide psychological support, social aid, food and medical treatment to effected people;
- To ensure coordination with other governmental authorities on the legal process of reconstruction, planning and projection work at disaster effected areas and to supervise the activities performed;
- To accept and provide international humanitarian aid;
- To prepare reconstruction and recruitment plans for post-disaster period in cooperation with Governmental Agencies, Local Authorities, Universities and Non-Governmental Organisations and to propound this plan to Supreme Committee of Disaster and Emergency Situations and to coordinate the application of approved plans, preparation of Expansion Reports related to application. [AFAD website]

The Earthquake Engineering Division at AFAD is responsible for developing the basic principles for the rehabilitation of structures damaged by earthquakes. The Ministry for Public Works and Settlement (MPWS) is also a key player during relief and recovery operations. The MPWS is responsible for damage assessment and reconstruction and rehabilitation of damaged buildings. The Ministry of Education is responsible for damages to schools. The provincial level is also heavily involved in relief and recovery in their jurisdiction (AFAD website).

1.3 Financing

1.3.1 Investing in preparedness

Concrete figures could not be obtained, as budget documents are not available in English. However, according to the official *IPA Beneficiary Needs Assessment – Turkey* report (UNDP/WMO, 2011) one percent of the national budget is allocated for studies, in-service training, education and awareness-raising amongst public authorities, volunteers and the population related to disaster risk reduction in Turkey. The budget of the Province Governorships is directly transferred from the AFAD Presidency. The governorship is then similarly required to transfer a minimum of one percent of their budget to the Provincial Disaster and Emergency Directorates. On top of the budget allocated by AFAD to the Provincial Disaster and Emergency Directorates, additional funding sources are available in case of any need or implementation of capacity building projects. However, although the State has a legal obligation (Law No. 7269) to fund the costs of reconstructing buildings after an earthquake, the State has no similar legal responsibility concerning DRR. There also appears to be a dearth of information regarding the exact budgeting for such resources.

International donations are the other principal funds contributing to the disaster related budget in Turkey. Over the last decade the World Bank provided over USD 1 billion for the improvement of infrastructure, emergency management and risk reduction activities and capabilities of the country; the Japanese International Cooperation Agency (JICA), the United Nations Development Programme (UNDP)²⁴³⁵ and the Swiss Agency for Development and Cooperation provided USD 870,000 to support of the UNDP Local Capacity Building for Disaster Prevention Programme, while the European Commission Humanitarian Aid Office has also contributed towards DRR in Turkey (UNDP/WMO, 2011).²⁴³⁶

²⁴³⁵ Contribution from the Target for Resource Assignment (core of USD 368,900) to support the National Programme for Disaster Prevention, aimed at improving public awareness, training, upgrading capacities in technological preparedness and impact mitigation.

²⁴³⁶ Ibid. Funding provided for 32 emergency and humanitarian relief projects through a contribution of 380,000 Euros for a UNDP programme to strengthen the capacities to cope with earthquakes and a further 20 million Euros for the Marmara Earthquake Recovery Project. IPA Needs Assessment#2, p. 12.

1.3.2 Investing in consequence management

Funding for relief in the aftermath of disasters comes directly from the central government. AFAD is authorized to allocate the disaster response and recovery budget to the related institutions and the local government in the scope of their needs. This comes, for instance, in the form of tents, the construction of temporary residences, and rubble clean up for the residents of damaged homes, as well as in the form of compensation funds during the rehabilitation phase. Following the earthquake in the Marmara Region, temporary residences were constructed by the MPWS. Supplying temporary residences required funding to cover the rental fee of land, the cost of infrastructure provision, and actual construction costs.

The Ministry of Finance has a Disaster Reserve Fund, which can be used for the disasters during the period of recovery (AFAD, 2013b).

Finally, since 1999, in the aftermath of the two major earthquakes that caused widespread destruction of the country's building stock, the Government of Turkey enforces compulsory earthquake insurance for residential buildings on a nationwide basis (Decree 587). With this decree law, it is compulsory to take out insurance for all residential buildings that fall within municipality boundaries, effectively abolishing the obligation of the government to extend credit to the victims of an earthquake (previously a requirement under the Disaster Law). The purpose was to privatize the risk in two steps: (1) by offering insurance through the Turkish Catastrophic Insurance Pool (TCIP, or DASK in Turkish – Do-al Afet Sigortalari Kurumu)²⁴³⁷, (2) then by exporting large parts of the risk to the world's reinsurance and capital markets. To serve this purpose, the World Bank funded the creation of the Compulsory Earthquake Insurance Authority as a separate state owned entity to carry out the National Catastrophic Insurance Programme (NCIP). This program became part of a larger initiative known as the Turkish Emergency Flood and Earthquake Recovery Program (TEFER – Türkiye Acil Sel ve Deprem İyileştirme Programı) (Gülkan et al, 2012).

The various mechanisms for financing disaster management in Turkey are shown schematically in the figure below.

²⁴³⁷ TCIP is a legal public entity managed by the TCIP Management Board, which consists of representatives of the Prime Ministry, the Treasury, the MPWS, the Capital Markets Board, the Association of Insurers, an operational manager, and an earthquake scientist. See: Turkish Catastrophe Insurance Pool, <http://www.dask.gov.tr>.

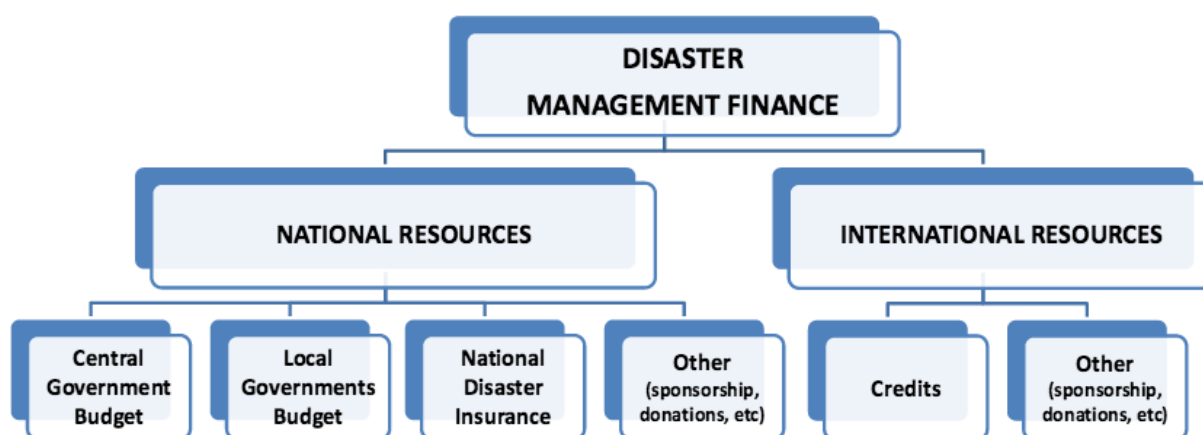


Figure 74: Current financial structure of disaster management in Turkey²⁴³⁸

Limitations of the programme:

Among the limitations to the current set up is that the compulsory scheme covers only residential buildings that fall within municipality boundaries, while dwellings in small villages are excluded; it does not coverage retrofitting nor promote renewal policies, and; the penalty for non-insurance is not sufficiently high. All of these drawbacks have been cited in reference to preventing the further productivity of the policy. In addition, as TCIP is a privately funded entity, its funding has been primarily dependent upon premium contributions made by homeowners under the insurance scheme (ibid).

1.4 Policy review, Evaluation & Organisational Learning

1.4.1 Post-Disaster Assessment

AFAD is formally charged with overseeing post-disaster assessments however there is no formal mechanism for assessing the experience of individual emergencies – either at the national or provincial / municipal level.

At the central level, the Presidency keeps records of events and prepares reports on particular emergencies or disasters where significant actions have been taken. For instance, the Presidency prepared a report (which included Lessons Learned) following the experience of the Van Province Earthquakes in 2011. The reports were then sent to all provincial directorates. These reports are also shared with other stakeholders to share experience and information with all relevant and involved stakeholders.

At the provincial level, following a response operation, the relevant authorities meet to discuss the adequateness and efficiency of the legislations and capacity. On this basis, new regulations and planning is introduced. However these discussions take place informally.

²⁴³⁸ AFAD (2013c). “Prime Minister Disaster and Emergency Management Agency.” Presentation on 13 December 2013, accessed http://www.oecd.org/gov/risk/HLRF_2013_Plenary_3_Tetik.pdf

1.4.2 Departmental Lessons Learned systems

There are no formalised Lessons Learned systems. Lessons learned practices are incorporated informally into post-disaster assessments, in particular where significant actions have been taken.

1.4.3 Centralised (national) Lessons Learned system

There are no formalised Lessons Learned systems. Lessons learned practices are incorporated informally into post-disaster assessments, in particular where significant actions have been taken.

1.4.4 International exchange for Lessons Learned

Turkey is engaged in international activities at the multilateral, regional and bilateral levels and currently profits from know-how and technological transfer coming from the UNDP and the World Bank. In addition to these activities, AFAD signed a Plan of Action with UN-OCHA in March 2013 to strengthen the partnership between the two entities. The plan foresees greater cooperation in information management, strategic and operational coordination, advocacy and capacity-building. The two are also working with Turkish NGOs to promote better collaboration with the international humanitarian response system.²⁴³⁹

AFAD shares information with EU Commission bodies (DG ECHO, ODDG, etc.) and attends meetings of the Commission in which it shares information regarding its risk and damage mitigation experience. However there is no integrated system connecting AFAD with the EU.

1.4.5 Regular policy reviews

AFAD conducts regular policy reviews through the high council meetings/boards where AFAD functions as the secretary (see section 3.1). Specific information on the scope and content of such policy reviews could not be obtained in the framework of this study due to lack of English translations.

1.5 Resilience

Turkey's approach to the concept of resilience is based on increasing disaster awareness through education (educational campaigns in 2013) with the aim to build a more resilient society. This is considered to be an important component of Turkey's overall approach to DRR. AFAD is responsible for education, training, and awareness-raising activities in the field of disaster risk reduction.

²⁴³⁹ UN-OCHA website, Turkey. Available <http://www.unocha.org/romena/about-us/about-ocha-regional/turkey>. Accessed 25 September 2014.

No specific international standard is pursued; rather, standardisation is sought through the application of the relevant regulations and circulars. AFAD undertakes the role of accrediting the NGOs and organises awareness raising meetings with the private sector representatives. However, they do not have a regulatory or auditing power on the standards for different stakeholders.

Equipment that has been standardised includes: uniforms/service dressed were standardised, provincial duties, representation in protocols, indispensable equipment at the provincial directorates were standardized.

1.6 Information sharing and data protection

Turkey does not have an updated database in use. While in the past there were obligations for civil defence that included registers, with the establishment of AFAD, civil defence records halted and it was turned into volunteering; They have the roster of NGOs but not the individual volunteers. So they do not share such volunteer information. Relevant regulation (for certification or standardisation) has not yet been prepared by AFAD. Studies on this issue are ongoing (expert interview).

No such policy is in place regarding the sharing of classified information and the current regulations do not foresee sharing of classified information. The regulation is developed based on local experience (ibid).

The use of social media is not common practice for the purpose of crisis management in Turkey. No such plans are in the making (ibid).

2 Legislation

2.1 Crisis (emergency, disaster) management concept

Law no 7269 on Precaution and Aid Against Disasters Effecting Common Life, dated 15 May 1959, introduced the concepts of disasters such as earthquake, flood, landslide, rock fall, avalanche, fire and storm, and possible disasters, and covers the measures to be taken for the protection of lives and property before a disaster in settlement areas that are prone to disasters.

Beyond this indication, however, a dedicated crisis management concept, other than the structures and documents described in this report, could not be obtained nor identified in the frame of this study.

2.2 General crisis (emergency, disaster) management law

The current disaster legislation framework consists of a range of laws, decree laws, regulations, directives and circulars which date back to the late 1920's and 1930's since the Republic of Turkey was established in 1923. The most important laws in the field of emergency and disaster management are as follows:

Law No. 7126 (1958) on Civil Defence established the General Directorate of Civil Defence under the Ministry of Home Affairs. With this, the directorate and its local branches were tasked with disaster response and preparedness.

Law No. 7269 (1959) on "Measures and Assistances to Be Put into Effect Regarding Natural Disasters Affecting the Life of the General Public" represented a critical codification of the legal regulations in terms of disaster management in Turkey. The law attempted to fill the legal gaps in this area and established the legal basis for different phases on disaster management and the establishment of relevant state organisations. The law has been amended several times, though it is still the main legislative document on disasters in Turkey.

Law No 3194 (1985), the Development Law, outlines the principles of preparation and implementation of plans for settlements, building construction and building permits by local and provincial governments, as well as the role of central government Ministries.

Law No. 5902 (2009) on the "Organization and Functions of the Disaster and Emergency Management Presidency" established the new department called "Disaster and Emergency Management Presidency" (AFAD) (*Afet ve Acil Durum Yonetimi Başkanlığı*) under the Prime Ministry. AFAD was established to take necessary measures for an effective emergency management and civil protection issues Turkish nationwide. The new law combines under one roof the actors responsible

for Disaster Management. The law describes the necessary administrative structure, its activities, responsibilities, relations with other units and running of tasks related to disaster and emergency management of natural technological and human originated hazards. The law aims: (1) To take necessary precautions and measurements on disaster and civil protection related services at country level; (2) to maintain coordination amongst the organisations that have a role in pre- and post-disaster activities; (3) to policy making and implementation on disaster management. (Ganapati, 2008; AFAD, 2012a)

Additional disaster-related laws, regulations, decrees and related measures can be found in the Table 49 below.

Table 49. Relevant legislation, Laws

Name of Law	Year	Law, Decree, etc. Number	Details
Civil Defence Law	1958	Law No. 7126	Establishes the General Directorate of Civil Defence under the Ministry and describes the responsibilities of the directorate and its local branches in relation to disaster response and preparedness; Addresses issues of training on civil defence
Measures and assistances to be put into effect regarding disasters affecting the life of the general public	1959	Law No. 7269	Confers extraordinary powers to provincial governors and district heads and details responsibilities of these and other key players in disaster scenarios; includes statements on relocation of settlements.
Decree on Basic Principles Related to Disasters Affecting the Life of the General Public	1968	Official Gazette No. 13007	Outlines the basic criteria to be used in declaring disasters
Extraordinary Situation Law	1983	Law No. 2935	Provides the legal basis for action to the respective bodies in a state of emergency (together with the 1984 Decree on State of Emergency Council (No. 84/7778))
Development Law	1985	Law No. 3194	Outlines principles for preparation and implementation of plans for settlements, building construction, and building permits by local and provincial governments; outlines role of MPWS concerning settlement plans, and that of State Planning Organization concerning regional plans.
Execution of services related to damage and disruption caused by natural disasters	1995	Law No. 4123	Outlines procedures of distribution of financial aid to areas affected by disasters
Regulations on Disaster Mitigation	1999	Decree No. 582	Provides information concerning debris removal following a disaster. According to the Decree, the Prime Ministry, and the Local Government support an Emergency Fund Program that provides resources from the Ministry of Finance in disaster response(Ural)
Regulation on Civil Defence and	1999 and	Decree Law No. 586 and	Enhances response capacity of the Ministry of the Interior (where the government's search and rescue teams are located) with the

Name of Law	Year	Law, Decree, etc. Number	Details
Municipality Law	2000	596	establishment of provincial directorates of civil defence in 11 provinces. These are equipped with necessary vehicles and devices recruiting 2500 personnel and 300 on a contractual basis, to prepare detailed local plans for their training and exercises; the SAR teams are to be created within hours.
Decree Law on Mandatory Earthquake Insurance	1999	Decree No. 587	Establishes the responsibilities of the Natural Disasters Insurance Administration and details how it is governed; provides information on the earthquake insurance regulation for residential buildings located in urban areas; Public buildings and buildings in rural areas fall outside the scope of the decree.
Law on Building Inspection	2001	Law No. 4708	Establishes responsibilities of Building Inspection Firms (BIFs) and inspection Committees regarding construction inspection.
Decree on Working Procedures and Principles of Natural Disasters Insurance Administrations	2001	Official Gazette No. 24600	Outlines the responsibilities, procedures and working principles of the Natural Disasters Insurance Administration
Law on Municipalities	2004	Law No. 5272	Establishes the responsibilities and describes the organisational structure of municipalities; provides details on their budget arrangements. It is the main legislation that gives additional power and responsibilities to Municipalities, previously limited to mitigating disasters
Disaster Insurance Law	2006	Law No. 6305	Determines the procedures and principles for the compulsory earthquake insurance to cover the financial losses which may arise in buildings due to earthquakes and for the insurance and reinsurance coverage to be presented in order to cover the material and physical damages which may arise as a result of various disasters and risks which cannot be covered by insurance companies, or which bring about challenges with regards to offering coverage.
Organization and Functions of the Disaster and Emergency Management Presidency	2009	Law No. 5902	Lays down the provisions to be implemented where there is a need for a declaration of a state of emergency in cases of serious disturbances of public order by epidemics, serious economic recessions, and comprehensive terrorist acts in order to distort the democratic order established by the Constitution and to eliminate fundamental rights and freedoms.
Restructuring [Transformation] of areas under risk of disasters	2012	Law No. 6306	Responsible for determining the procedures and principles regarding recovery, resettlement, renewal to provide healthy and safe living environments in the areas under the risk of disaster and in the other areas and fields where risky constructions exist.

Sources: AFAD, 2012a; Ganapati, 2008; Ural 2005

2.3 Emergency rule

The conditions for extraordinary situations resulting in a state of emergency are described in Art. 4 of the Law No. 7269. Expert interviews reveal that the conditions vis-à-vis the concept of urgency as laid out in Law no 7269, however, are vague and not clearly defined.

The 1983 Law on State of Emergency (No. 2935) and the 1984 Decree on State of Emergency Council (No. 84/7778) provide the legal basis for action to the respective bodies in a state of emergency. Under the law, a state of emergency can be announced by the Prime Minister only. If a state of emergency is declared by the Council, Governors and district heads are mandated to implement it.

Under Law No. 2935, personal rights may be restricted with the decision of the Cabinet and Council of Ministers.

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

Under the new Law No. 5902 (2009), AFAD is responsible for coordinating nearly all phases of disaster management including disaster risk reduction (DRR) at the national level, and installs rules, regulations, and guidelines for preparation of DRR plans at sub-national levels. It also has a coordination role between the various institutions and organisations that are responsible for different types of disasters. This includes the Forestry and Hydraulics Ministry for floods, the Environment and Urbanization Ministry for climate change, and the Food, Agriculture and Livestock Ministry for droughts.

However, according to Law No. 7269 of 1959, which is the main legislative document and relates to all disaster-related activities and responsibilities at country level, MPWS is the coordinating governmental body. Both legislative acts are in operation, which means the coordination itself has not been identified very clearly by related legislation. Moreover there are still “conflicts between laws governing sectorial responsibilities and the Disaster Law as well as what type of planning processes are necessary for DRR which need clarification.” (UNDP/WMO, 2011: 9). For example, MPWS is the main body responsible for the coordination of disaster response activities (Law No. 7269), whereas AFAD is responsible for coordinating nearly all phases of disaster management, including DRR at the national level, and for instigating the rules, regulations and guidelines for the preparation of DRR plans at the sub-national level (Law No. 5902).

Although the Law No. 5902 greatly improved the efficiency of the different phases of the disaster management cycle, official documents report that the coordination mechanisms between AFAD, MPWS, PMCMC and the ministries on the one hand, and between public authorities and other actors on the other, remain insufficient (ibid).

2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

Law No. 5902 transferred significant levels of responsibility to local authorities. While the central government is responsible for reconstruction and rehabilitation, responsibility for mitigation, preparedness and response activities, such as the implementation of earthquake-resistant building codes for construction within their jurisdiction, come under the authority of the province (Governor) and District (Qaimaqam). Response to a disaster is under the responsibility of the Governor at the Provincial level and Qaimaqam at district level.

The latest legal arrangements regarding local government in Turkey are the Special Provincial Administration Law (No. 5302), the Municipality Law (No. 5393) and the Metropolitan Municipality Law (No. 5216). The Municipality Law No. 5393 is the main legislation that gives additional power and responsibilities to municipalities.²⁴⁴⁰ According to this law, local governments are now responsible for making disaster and state of emergency plans, as well as public awareness programmes.

The law states:

Bearing in mind the characteristics of the town, the municipality shall draw up the necessary disaster and emergency plans to protect the town from fire, industrial accidents, earthquakes and other natural disasters and reduce the damage caused by such disasters, and prepare the necessary teams and equipment for the purpose.

In the preparation of emergency plans, coordination shall be ensured with other provincial-scale emergency plans if any, and the opinions of relevant ministries, public organizations, professional organizations, universities and other local governments shall be consulted.

Necessary measures shall be taken to educate the public in accordance with the plans, and joint programs may be drawn up with the authorities, entities cited in the second paragraph. In the event of a fire or natural disaster outside the municipal boundaries, the municipality may provide the necessary assistance and support to the regions concerned. (Art. 53)

Expert interviews further indicate that the provincial directorate has no real autonomy and capabilities to take initiative at all levels are limited. The provincial directorates do not have financial capacity to intervene on their own; rather, additional financing must be requested from the Presidency, and then it may be allocated to the province.

²⁴⁴⁰ A municipal administration can be established in localities of more than 5,000 inhabitants with a referendum. As to provinces and districts, municipal administration has to be instituted irrespective of their population. Metropolitan municipalities are defined as "Cities which comprise more than one district within their own boundaries". This concept was introduced by the Act of Metropolitan Municipalities (No. 5216). See Ural (2005a) for more information.

2.6 Legal regulations on the involvement of volunteers and specialised NGOs

Prior to 1999, NGOs other than the TRCS did not have a legal role to play in disaster preparedness. Laws and regulations have since been introduced to formalise their participation. For example, under the Directive on Conditions of Participation of Volunteers in Civil Defence Service, volunteer search and rescue teams can participate in training and drills undertaken by the General Directorate of Civil Defence. The Regulation on Voluntary Participation in Services of Special Provincial Administrations and Municipalities states that “Special provincial administrations or municipalities may, depending on their purview, employ volunteers” for the purpose of “Inspection and emergency services such as traffic, fire fighting, search and rescue”(Official Gazette Issue: 25961, Art 5).

Specific provisions for the involvement of the NGOs however are mainly foreseen in the provincial plans prepared by the provincial directorates. No specific rules or policies on liability or insurance regarding their involvement are in place. It is anticipated that this issue will be handled together with the regulation of volunteer participation.

2.7 Legal regulations for international engagements of first responders and crisis managers

The Presidency is authorised to establish connections for international engagement; In kind and in cash assistance or other technical support provided by the international organizations are coordinated through the Presidency. Law no. 7126 on Civil Defence (1959) regulates the rescue and first aid actions that are to be carried out during disasters. The provincial directorate are not capable to establish connections with the international organizations.

3 Organisation

The new Law No 5902 defines the central and provincial level structure of crisis management in Turkey, which involves all concerned governmental bodies and is replicated almost identically at the central (Prime minister), provincial (Governor) and local (Sub-governor/Qaimaqam/District Governor) levels.²⁴⁴¹

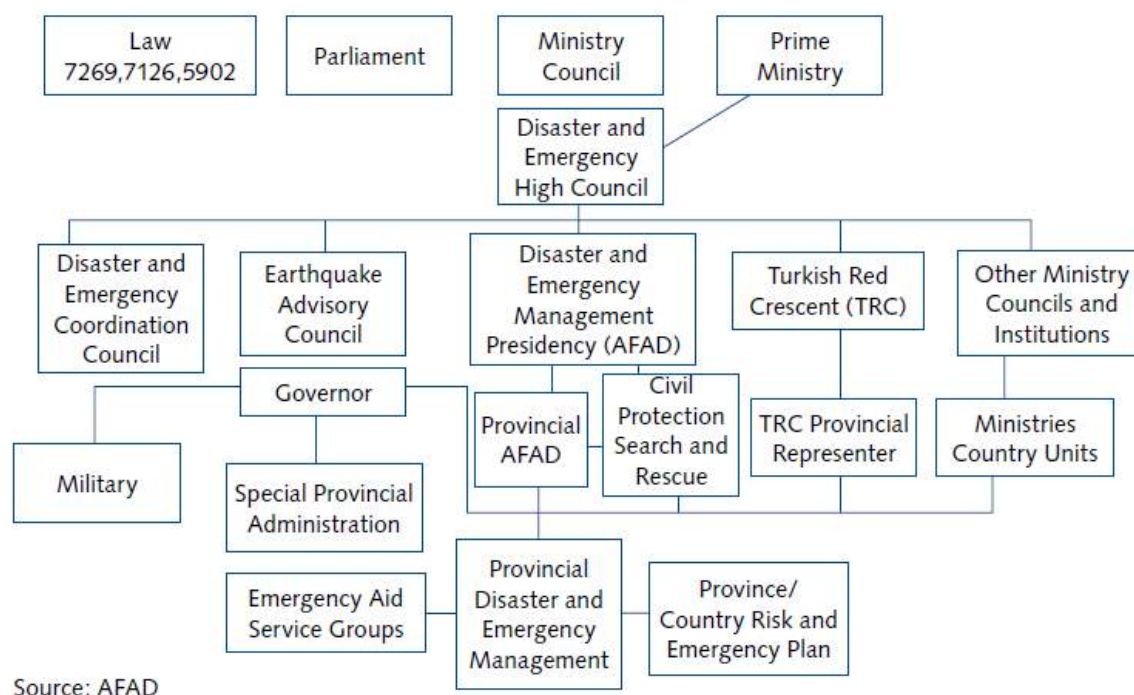


Figure 75: Organisational Management of Disaster and Emergency Management in Turkey²⁴⁴²

3.1 Organisational chart

The following organisations have a crucial role in the Turkish disaster and crisis management:

- AFAD (central and provincial)
- Government ministries, in particular
 - Prime Ministry Office
 - Ministry of Public Works and Settlement (MPWS)
 - Ministry of the Interior
 - Ministry of Environment and Forests (MEF)
 - Ministry of Health

²⁴⁴¹ Local authorities in Turkey are of three types: Municipalities, Special Provincial Administrations, and Village Administrations.

²⁴⁴² Gülkan et al, 2012, "Disaster Risk Management in Turkey." In *Improving the Assessment of Disaster Risks to Strengthen Financial Resilience. A Special Joint G20 publication by the Government of Mexico and the World Bank*.

- Public security bodies (e.g. police HQ, gendarmerie, fire services)
- Provincial units and municipalities
- TRCS, NGOs
- Turkish Armed Forces

The range of actors that may be involved in a disaster or crisis situation in Turkey are many and wide-ranging and may include institutions not dedicated to crisis management services, e.g. Housing Development Associations or DSI. See, for instance, the range of possible actors in Figure 76 below.

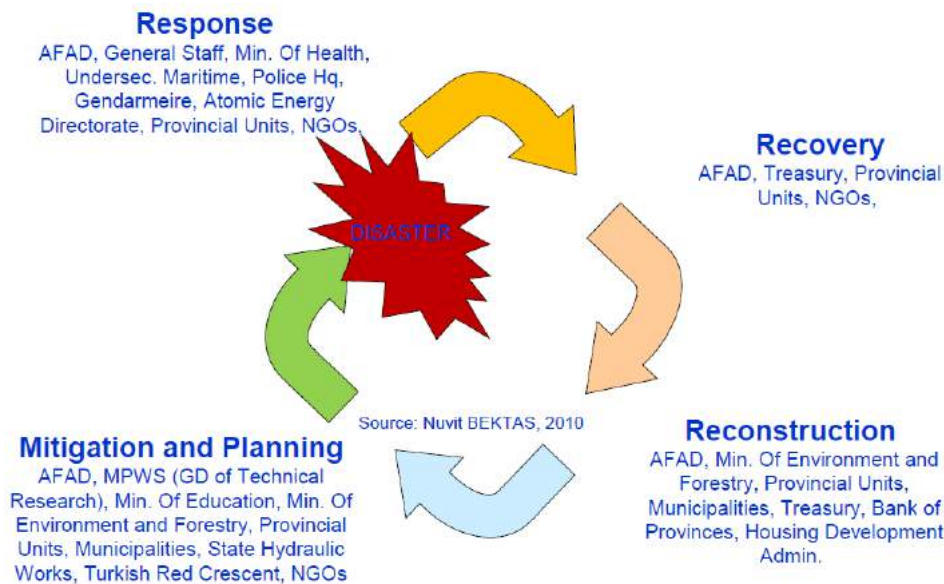


Figure 76: Crisis Management Cycle²⁴⁴³

The AFAD Presidency undertakes the coordination function at the centre, while the responsibility for developing and implementing disaster preparedness plans and operations in Turkey lies with the provincial organisations – the Provincial Disaster and Emergency Directorates.

3.1.1 National level authorities and organisations

Disaster and Emergency Management Presidency (AFAD)

AFAD was established by the Law No. 5902 (2009) to take necessary measures for the provision of effective emergency management and civil protection issues nationwide and for the coordination of other institutions at every phase of disaster management. AFAD functions like an umbrella organization; depending on the nature (type of disaster ranging from floods to extreme weather to earthquakes), the incidence level (local, provincial, national) and magnitude of the disaster or emergency, AFAD collaborates with the Turkish General Staff, the Ministry of Foreign Affairs, the Ministry of Health, the Ministry of Forests and Hydraulic Works and other relevant ministries as well

²⁴⁴³ AFAD, 2010, "A New Disaster Management Structure in Turkey." Presentation at the 1st Meeting of the European Forum for Disaster Risk Reduction (EFDRR), Stenungsund, Gothenburg, Sweden, 6-8 October 2010.

as non-governmental organizations. In a disaster and emergency situation, AFAD is the only responsible organisation at the national level.

AFAD has the responsibility for coordinating nearly all phases of disaster and crisis management including disaster risk reduction (DRR) at the national level, and installs rules, regulations, and guidelines for preparation of DRR plans at the provincial (sub-national) levels. It also has a coordination role between institutions and organizations. AFAD is authorized to act in all disasters and emergencies situations in the country. It has the mandate to produce and implement policies on: (i) pre-incident: preparation, mitigation and risk management before the occurrence of events, (ii) during incident: response during the event, (iii) post-incident: recovery and reconstruction after the event, and (iv) and for the effective implementation of these activities across the country.

AFAD further has the mandate to:

- define the needs of in kind, in cash and humanitarian assistance;
- determine management strategies;
- establish and operate all kinds of information, communication, forecasting and early warning systems;
- make proposals to the relevant authorities with the need of public investment and personnel;
- implement training activities and exercises;
- take the recovery measures to ensure return to normal life after the disaster;
- provide temporary settlement in disaster areas.

The law also established eight central level departments within the new unit. These are:

- Department of Planning and Mitigation
- Department of Response
- Department of Recovery
- Department of Civil Protection
- Department of Earthquakes
- Department of Administrative Affairs/Services
- Department of Information Technologies and Communication [Added 24 October 2011]
- Department of Strategy Development [Added 24 October 2011]
- Department of Legal Consultancy [Added 24 October 2011]²⁴⁴⁴

Figure 77 illustrates the organisational chart of the Presidency. The duties and responsibilities of the departments are outlined in Chapter 1.

²⁴⁴⁴ AFAD, 2009, "A new change in the disaster management structure of Turkey," Prime Ministry, 17 December 2009, accessed 25 September 2014, <http://preventionweb.net/go/12840>.

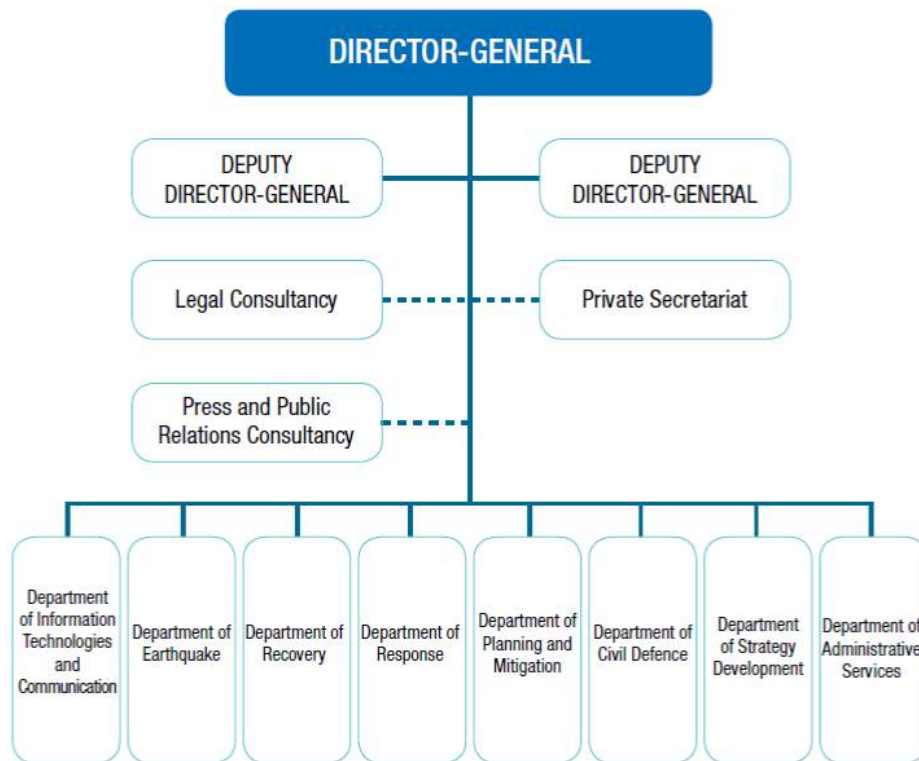


Figure 77: Organisational Chart of the Disaster and Emergency Management Presidency (AFAD)²⁴⁴⁵

Under the eight departments, several working groups have been established to cover different topics as shown in Figure 78 below.

²⁴⁴⁵ AFAD (2012a) "AFAD Strategic Plan 2013 – 2017." Ankara, Turkey: Republic of Turkey, Prime Ministry Disaster and Emergency Management Presidency.

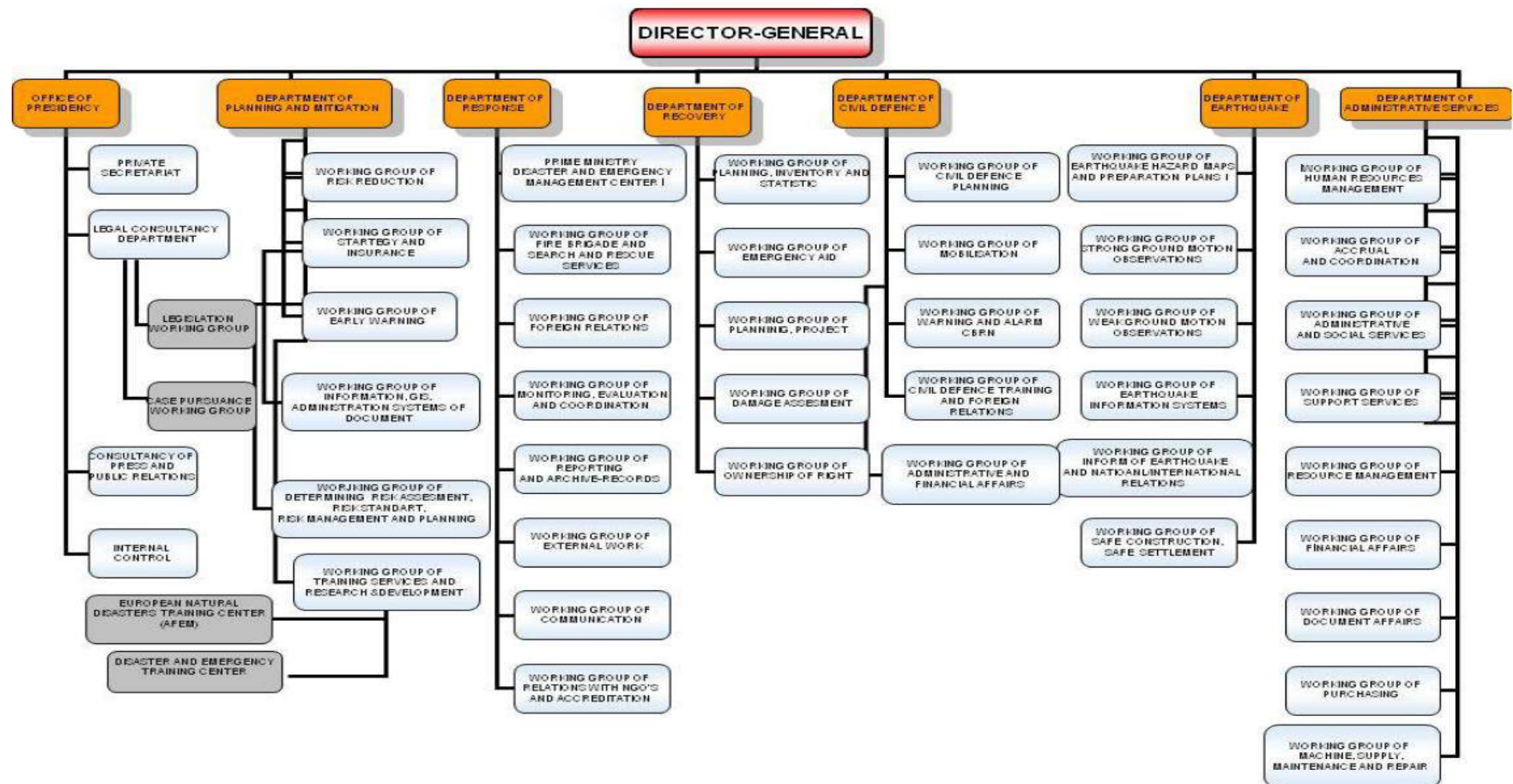


Figure 78: Working Groups under the Central Level Departments of the CM authority ²⁴⁴⁶

²⁴⁴⁶ AFAD, Strategic Plan 2013 – 2017

In addition to these departments the plan outlines three high levels boards/committees. The composition of these committees/boards is presented in Figure 79.

- **The Disaster and Emergency Management Higher Committee/Supreme Board**, consists of appointed ministers under the chair of the Prime Minister or his/her appointed Deputy Prime Minister. The board is tasked with the duty of approving the plans, programmes and reports related to disasters and emergencies. The Board convenes twice yearly, and may be summoned for an extraordinary meeting at the request of the chair. The Secretariat of the Board is conducted by the Presidency (AFAD).
- **The Disaster and Emergency Management Co-ordination Committee/Board**, is composed of the relevant undersecretaries and organization executives under the chair of Undersecretary of the Prime Ministry (i.e. Undersecretaries of National Defence, Interior, Foreign Affairs, Finance, National Education, Health, Transportation, Energy and Natural Sources, Environment and Forest and Public Works and Settlement Ministries; Undersecretary of State Planning Organisation, Director General of Disaster and Emergency Management Presidency, Head of Turkish Red Crescent).

The Board is responsible for evaluating information in cases of disasters and emergencies, determining measures to be taken, ensuring and inspecting their implementation, and ensuring coordination with agencies, organizations and NGOs. The Board convenes at least four times a year, and may be summoned for an extraordinary meeting at the request of the chair when needed.

- **The Earthquake Advisory Board (EAB)** is comprised of the relevant representatives under the chair of AFAD and is responsible for presenting alternative policies for mitigating damages caused by earthquakes and setting priorities and policies for earthquake-related research. The EAB is a multi-stakeholder consultancy mechanism. The EAB provided support to the Earthquake Department in the Presidency in the preparation the National Earthquake Strategy and Action Plan that was launched in 2011. The secretariat of the Board is conducted by the Earthquake Department of the Presidency.

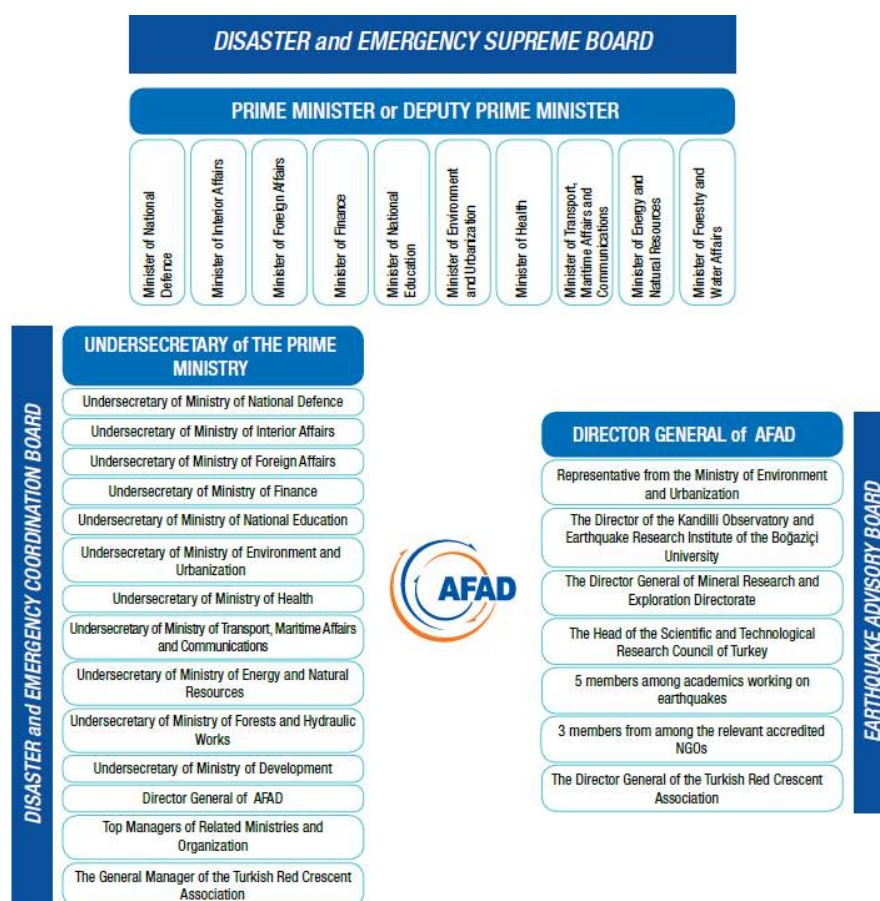


Figure 79: AFAD Disaster and Emergency High level boards/committees²⁴⁴⁷

Other Government Ministries involved in crisis management/risk reduction and Inter-ministerial arrangements

The institutions involved may vary depending on type and severity of disaster/risk. In addition to AFAD, the relevant institutions include:

Ministry of Public Works and Settlement (MPWS), acts as the main body responsible for the coordination of disaster response activities (according to Law No. 7269) and develops the standards for seismic microzonation to guide safe construction within the regulations concerning “Specification for Structures To Be Built in Disaster Areas.” The MPWS is responsible for implementing and monitoring the regulations at the central level, while it is the responsibility of the municipalities to administer and enforce these regulations in practice (UNDP/WMO, 2011).

Ministry of Environment and Forestry (MEF) comprises the bodies responsible for the national hydrological (i.e. **General Directorate of State Hydraulic Works - DSI**) and meteorological services (i.e. **General Directorate of State Meteorological Services - DMI**) in Turkey:

- The **DSI** operates the National Hydrological Observation Network through its 23 regional offices and is responsible for monitoring the whole country, excluding the large urban areas where responsibility is held by the Municipalities, and for hazard assessment of flood and hydraulic drought. DSI is responsible for the monitoring the whole country excluding the

²⁴⁴⁷ AFAD, Strategic Plan 2013-2017.

large urban areas where responsibility is held by the Municipalities With 25 regional directors, DSI coordinates the preparation of the strategic and action plans for the water sector. Specific tasks include: managing the national hydrological database; producing annual and monthly reports, and; the provision of hydrological services to the agriculture, energy, environment and services sectors.

- The **DMI** operates and maintains the National Meteorological Observation Network and is responsible for monitoring and hazard assessment of meteorological hazards. Specific tasks include: producing meteorological analyses, weather forecasts and disseminating hazard warnings (and related information) to authorities and the public. The main objective of the DMI is to: make observations, provide forecasts; provide climatological data, archive data and other information; communication of these to the public; provide meteorological needs for army and civil aviation.

Both the DMI and DSI play a role in policy making on DRR planning through the Ministry of Environment and Forestry (MEF) as sources of basic hydro-meteorological information, though they do not have a role as integrated partners in policy making and strategy planning of the national DRR (WMO, 2012).

Ministry of Agriculture & Rural Affairs, through the *General Directorate of Agricultural Production and Development (TUGEM)*, is responsible for the Agricultural drought management and coordinator of the Turkey Agricultural Drought Action Plan, specifically for the Monitoring and Early Warning Committee and the Risk Assessment Committee. The *General Directorate of Agricultural Research (TAGEM)* (also falling in the same Ministry) provides services and information to TUGEM and collaborates with DMI to develop R&D projects on agrometeorological early warning and crop simulation modelling.

Ministry of Energy and Natural Resources, through the *General Directorate of Electrical Power Resources Survey and Development Administration (EIE)*, carries out engineering services for the production of electrical energy and is an investor public organisation. It was established under Law No. 2819 and has the status of a juridical person, governed by private law and administered in accordance with commercial methods. (WMO, 2012; UNDP/WMO, 2011)

Turkish Red Crescent Society

The Turkish Red Crescent Society (TRCS) is the main non-governmental organisation operating in the field of disaster management in Turkey. TRCS is supported by the International Federation of the Red Cross (IFRC) and the Red Crescent societies and forms an independent national organisation with strong legislative links to the Government and funding. It has national, provincial and district level committees that are heavily involved in disaster preparedness through the conduct of public awareness and training activities. TRCS also actively operates in disaster areas through its search and rescue (SAR) activities. (UNDP/WMO, 2011). Other NGOs active in the field in Turkey are presented in Chapter 5.1.

Turkish Armed Forces

The Turkish Armed Forces are a part of central local disaster management in Turkey (though they do not play a role in DRR). During emergencies, authorities coordinate response activities with the Turkish Armed Forces. In the aftermath of the August 1999 earthquake, the Turkish Armed Forces made the decision to form a battalion size search and rescue Unit subordinate to Special Forces Command with intent to better cope with large-scale natural disasters. The special group is called “Natural Disasters Search and Rescue Battalion” (DAK) (UNDP/WMO, 2011).

3.1.2 Provincial level organisations

The dual organization of local administration in Turkey that was mentioned in the introduction to this chapter, comprised of appointed governors on the one hand and elected municipal officials on the other, establishes the basis for distinguishing their different roles in disaster management. The *IPA Beneficiary Needs Assessment* report states that,

*Provincial governors are agents of the central authority; therefore they perform in-line functions when managing emergency situations province-wide. This is achieved through powers provided in the ‘Disasters Law’ (7269). Accordingly, the governor assumes authority to act in extraordinary situations. The mayor and municipal bodies fall under the authority of the governor in these circumstances.*²⁴⁴⁸

The organizational structure of crisis management and disaster risk reduction at the provincial level is under the authorization of the governor. The governor does not have an operational role but coordinates and mobilizes others. The governor may also demand assistance from other provinces, which have not been affected by a disaster. Figure 80 shows an example organisational chart of the provincial level for the Bursa province.

Organisational procedures

At the provincial level, the Law on Municipalities No. 5272 (2004) mandates the provincial and district governments to prepare Emergency Assistance Plans. The provincial directorate of AFAD prepares the provincial plans, which are then submitted to the governorate for approval. There are 26 service group plans below it. Depending on the type of crisis/disaster situation, the relevant public agency is to take responsibility in line with its provincial plan and in compliance with the plan of the provincial directorate of AFAD. Out of those 26 service groups, 8 group plans are prepared by the provincial directorate of AFAD. The other 18 is prepared by the provincial directorates of other central institutions/ministries.

Provincial directorates

AFAD undertakes its responsibilities at the provincial level through the **Provincial Disaster and Emergency Management Directorates**, which are legally required in each city / province, and are directly attached to the city governor, and the **Provincial Civil Defence Search and Rescue Team Directorates**, which have been established in 11 provinces. Each governorship also has its own

²⁴⁴⁸ UNDP/WMO, 2011, “IPA Beneficiary Country Needs Assessment – Turkey,” p. 9

Provincial Rescue and Aid Committee (RACs), responsible only for response and recovery activities. The 11 provincial civil defence search and rescue directorates were established to reinforce the provincial rescue and aid committees and local relief forces with more professional and alert reserves at strategically stationed regional centres.

The Provincial Directors for Disaster and Emergency are the authorities responsible for the coordination and mobilisation of human, material and monetary resources inside and outside of the province (Law No. 7269). They are responsible for:

- Determining hazards and risks at the provincial level;
- preparing provincial emergency aid and response plans for the province with the help of the Provincial Search and Aid Groups and in cooperation with the Provincial Red Crescent Units (Law No. 5902);
- implementing and monitoring emergency and response plans in times of disasters;
- managing the logistic services at the time of disaster and emergency;
- undertaking loss and damage assessments of the province;
- accrediting civil society organisations involved in disasters (e.g., search and rescue teams);
- managing the Provincial Disaster and Emergency Management Center; and,
- educating the public. (UNDP/WMO, 2011).

According to the *IPA Beneficiary Needs Assessment - Turkey* report, “A common problem is that provincial officials in charge of disaster management are in most cases unfamiliar with the reality on the ground, especially as the turnover of government officials can be high in certain provinces.” (2011).

Provincial Civil Defence Search and Rescue Team Directorate

The 11 provincial civil defence search and rescue directorates were established by Decree Law No. 586 and Decree 596 (2000). These are: Adana, Afyon, Ankara, Bursa, Diyarbakir, Erzurum, Istanbul, Izmir, Sakarya, Samsun, and Van. Each one is equipped with necessary vehicles and devices recruiting 2500 personnel and 300 on a contractual basis, to prepare detailed local plans for their training and exercises.

Provincial Rescue and Aid Committees (RACs)

Under each RAC, there are 9 service groups. The 9 service groups are responsible only for response and recovery activities. These include: communications, accessibility/transportation, search and debris removal, first aid and medical services, damage assessment and temporary shelter, security, purchase-rental distribution, agricultural services, and electricity-water sewer (Ganapati, 2008; WMO, 2012). Both the provincial and district levels are mandated by law to have rescue and aid committees (RACs).

Turkish Red Crescent

In every province and district, TRCS has its own branches for community participation; at the Provincial level, it is involved with the provincial RACs that serve to foster community participation through volunteers and community leaders in each province and also has branches in most of the

major cities. TRCS provides blood transfusion services, first aid trainings and disaster preparedness training to support preparedness efforts (TRCS website). See also Chapter 4.3 and 5.1.

Military:

Although the military plays an important role in Turkey, the role of the Turkish Armed Forces in disaster management is limited to the coordination of response activities and the provision of support through provincial garrisons that are in direct contact with the governors (UNDP/WMO, 2011).

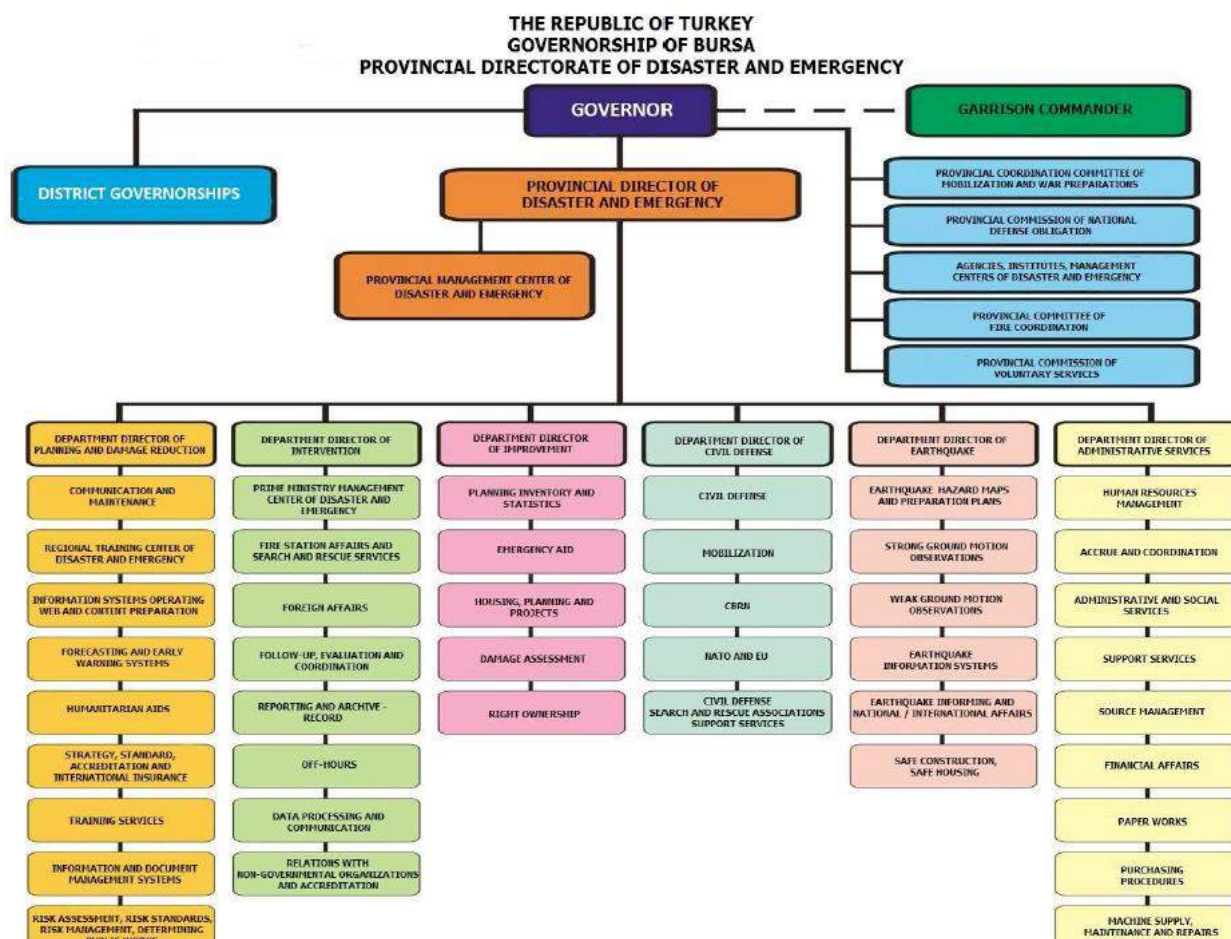


Figure 80: Example Organisational Chart of Provincial Directorate for Disaster and Emergency Management of Bursa Province²⁴⁴⁹

3.1.3 Municipal level authority and organisations

The municipality, via the governors, are responsible for preparing and implementing disaster and emergency plans for their jurisdiction, and organising mitigation, preparedness and response measures. The governor of the municipality must ensure the feasibility of local disaster and state of emergency management plans as well as their compatibility with the provincial and national level plans.

²⁴⁴⁹ UNDP/WMO, 2011, "IPA Needs Assessment".

The Law on Municipalities (No. 5272/5393, 2004), states “The Municipality shall make plans according to the characteristics of the territory in order to prevent fire, industrial accidents, earthquakes and other natural disasters and to minimise the risks of such events and prepare the teams and equipment for action” (Art. 53). These laws are discussed in more detail in Section 2.5.

At the district and municipal level, officials:

- organise disaster preparedness activities,
- control fire departments,
- implement and monitor regulations on MPWS building standards for seismic micro-zones, land use decisions, and
- make preparations for the development strategies (under the provisions of the 1985 Development Law).

One issue that has been noted in official reports is that the mayors and municipal bodies are not held liable for DRR activities and come under the authority of the governors in extraordinary situations. It is the provinces that bear all responsibility. This constitutes a problem because the provinces are not involved in local DRR activities.²⁴⁵⁰

TRCS has its own branches for community participation at the district/local level, similar to the province level. See 3.1.3 above.

3.2 Organisational cooperation

As described in section 3.1, AFAD has the primary responsibility for coordinating emergency organisations in Turkey.

Interviews with key stakeholders indicate that in the case of simultaneous occurrences of events, there are bilateral MoUs signed and in place, where parties take action accordingly. Teams are mobilised immediately according to the e-mail or fax that comes from their stakeholders. Principal areas of international organisational cooperation are coordination in response and risk sharing.

In terms of regional cooperation,

Since 2008 Turkey has been represented at the regional level by the [AFAD] through the Disaster Preparedness and Prevention Initiative (DPPI) for South Eastern Europe and hosted the regional DPPI meeting in 2009. [...] Another form of regional cooperation concerning disaster management is Turkey's engagement within the Civil-Military Emergency Planning Council of South Eastern Europe, which encourages civilian control of military resources during disasters whilst building a multi-national “network of networks” that favours cooperation between neighbouring countries. Turkey and Greece signed the Protocol on the Formation of a Joint Hellenic-Turkish Standby Disaster Response Unit to improve cooperation and joint response

²⁴⁵⁰ “The IMM is a special case due to the fact that the Istanbul Metropolitan Municipality Disaster Coordination Centre (AKOM) was established to act as the responsible head of the fire brigades, health, transportation, enterprises and civil defence departments when an emergency situation arises.” The issue of liability has been noted in WMO (2012), UNDP/WMO (2011), and UNDP(2013).

*mechanisms. A joint exercise was successfully conducted in Ankara in December 2006. The Black Sea Economic Cooperation Agreement signed by Turkey includes a clause for emergency assistance and emergency response to natural and manmade disasters. Hazard and risk assessments are developed jointly by the Mediterranean countries. A real-time flood forecasting and early warning system for the Maritsa and Tundzha rivers was developed jointly by Turkey and Bulgaria with French and Dutch support as a constituent of the European PHARE Project: Capacity Improvement for Flood Forecasting in the Bulgarian-Turkish Cross-border Cooperation Region. A Data Exchange Tool for the DSI, the MEF and decision makers was created along with a dynamic website that is accessible to the general public.*²⁴⁵¹

In addition to these activities, AFAD signed a Plan of Action with UN-OCHA in March 2013 to strengthen the partnerships between the two entities. The two are also working with Turkish NGOs to promote better collaboration with the international humanitarian response system.²⁴⁵² Other partners include FEMA, with which Turkey has initiated important hazard reduction related agreements (e.g., Cooperative Hazard Impact-reduction Effort via Education (ACHIEVE)).

Turkey is an active member of the Capacity for Disaster Reduction Initiative (CADRI) and is eligible for support coming from the Euro-Atlantic Disaster Response Coordination Centre as a NATO member. As a candidate country for EU accession, Turkey receives significant support from the European Union and participates in a range of projects and activities. The Ministry of Interior has participated in meetings of the EU General Directorate since 2000 and is eligible to participate in the EU Civil Protection Mechanism for Facilitating Cooperation in the event of Major Emergencies. (UNDP/WMO, 2011).

In terms of regional cooperation, AFAD actively participates in the activities and projects of DPPI SEE, BSEC, ECO, NEAMTIC and EUROMED PPRD which are mostly based of disaster preparedness and prevention.²⁴⁵³

²⁴⁵¹ UNDP/WMO, 2011, "IPA Needs Assessment", p. 23-24.

²⁴⁵² UN-OCHA, "Turkey."

²⁴⁵³ Statement by H.E. Ambassador Mehmet Ferden Cariki, Preparatory Committee of the 3rd World Conference on Disaster Risk Reduction, 14-15 July 2014, Geneva.

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

No SOPs at the central level could be identified in the context of this study, while provincial level stakeholders in the country indicate that at the provincial level, response plans include such procedures. The unit which is responsible to manage the disaster response is defined as “solution partner” in the response plan. That institution also prepares its own provincial plan, and collects necessary capacity information from other relevant public offices in the province.

The SOPs include the following:

- Where the institutions will gather in the event of emergency or crisis
- How the aforementioned institutions will reach the disaster regions – plan is developed
- Service units plan how to locate their service groups in the region.

However the stakeholders indicate that the SOPs are not fully understood by all institutions, though they aim to assist the provincial institutions through meetings and trainings. The provincial plans include a section for regular tests and drills to be held, however this has not yet been implemented. A national CBRN (chemical, biological, radiological and nuclear) drill is planned in the coming months in Istanbul. Relevant staff from all 81 provinces will attend the drill.

4.2 Operations planning

Central government and provincial/district government bodies, the military and NGOs are responsible for drawing up emergency preparedness and response plans (see Figure 73)

At the national level, a **National Disaster Management Strategy and Action Plan** is under preparation (as of the publication of the AFAD Strategic Plan 2013-2017) with the purpose of forming an effective and efficient management structure and high-level strategy that will ensure consistency and harmony between national plans. The national plans determine the duties, powers and responsibilities of all stakeholders involved in the national disaster management system. The national plans have been, or are in the process of being prepared. These include:

- National Disaster Response Plan
- National Recovery Plan
- National Disaster Mitigation Plan

Turkey Disaster Response Plan (completed): Finalized in 2013, the National Disaster Response Plan (UAMP) covers all the response activities necessary in case of any disaster or emergency and defines the processes, roles and duties of the service groups, coordination units and other central and local bodies that will take part in the response operations, including also communication ways and logistics in the event of a disaster/crisis. For instance, the Ministry of Health will be responsible for the psycho-social support to be provided for the surviving victims. The Plan identifies the basic

principles of response planning before, during and after disasters. UAMP has been prepared by AFAD with the support from all relevant actors that have a role in response phase. The response plan will take effect in 2015.

According to the *HFA Monitor Report* (2013),

The plan links completely the central and local management and the supporting actors. Geographical Information System based implementations that come into force for better management of the disasters and emergencies. Logistical needs are identified and steps taken for the creation of logistical centres. Special tents were designed which are proper for the Turkish families and for four seasons and stocked 65000 unit. Istanbul Civil Defence Search and Rescue Brigade is certified as a heavy class brigade by UN INSARAG and it is targeted that all the brigades will be certified in a few years. Together with the countries in the region, search and rescue exercises are performed in a planned way especially with NATO and European Union. For more effective coordination of civil and military assets, Turkey, Qatar and Dominican Republic initiated HOPEFOR initiative in 2010 and the Second International HOPEFOR Conference took place in Antalya in 2012 and an exercise took place in the scope of the conference which shows the effective coordination of civil and military assets. It is planned that Land Forces Command Natural Disasters Search and Rescue Troop will give trainings on natural disasters to Kyrgyzstan and Albania delegates. To reduce the loss of life and property in multi dwelling places like the institutions, the schools, the teacher guest houses, the club houses, the Ministry of Education issued a circular letter for performing 'Personnel Evacuation Exercise' to the central and local organization, the schools and the institutions during the Week of Earthquake between 01-07 March.²⁴⁵⁴

National Recovery Plan (Planned / Waiting to be confirmed as of the HFA National Progress Report 2011-2013 report): To be prepared by end of 2014, the National Recovery Plan will ensure that life returns to normal as soon as possible after a disaster. The plan aims to increase the speed of recovery by addressing several factors, such as social, economic, physical and environmental factors and IC technologies.

National Disaster Mitigation Plan (in development/planned): To be prepared by end of 2015, the National Disaster Mitigation Plan constitutes an important step in the transition from crisis management to risk management. The plan aims to increase the public's capacity to cope with disasters by defining the activities carried out for the purpose of identifying disaster hazards and risks as well as for preventing or minimizing their impacts (AFAD, 2012a; AFAD, 2013b)

Procedures related to the development of operational plans

At the provincial level, the provincial directorate of AFAD prepares the provincial Emergency Assistance Plans for their provincial district governments, which are then submitted to the governorate for approval. There are 26 service group plans below it. Depending on the type of crisis/disaster situation, the relevant public agency is to take responsibility in line with its provincial plan and in compliance with the plan of the provincial directorate of AFAD. Out of those 26 service groups, 8 group plans are prepared by the provincial directorate of AFAD. The other 18 are prepared

²⁴⁵⁴ AFAD, 2013b, "HFA Monitor Report - Turkey," 30.

by the provincial directorates of other central institutions/ministries. The plans of the provincial directorate of AFAD are:

- (i) service logistics,
- (ii) sheltering services,
- (iii) CBRN service,
- (iv) search and rescue,
- (v) budget and accounting,
- (vi) procurement,
- (vii) resource management,
- (viii) information management.

These plans are directly linked with the national level plans. The same plans are also prepared at the national level by the relevant central organizations/ministries (AFAD, 2013b).

According to the *IPA Needs Assessment* report (2011), these provincial level Disaster Emergency Relief Plans currently exist irregularly, depending on the type and magnitude of the disaster in the event of an earthquake. Moreover, the preparation of regional contingency plans remains optional. As a result,

*certain areas present a low level of preparedness, while areas of fast growing and illegal urbanisation lack emergency relief plans altogether. Plans prepared at different scales differ in their scope and strategy and create overlaps and contradicts. This is particularly the case in metropolitan areas, where government has charged different institutions with establishing local relief plans according to their realm of expertise.*²⁴⁵⁵

The Turkish Red Crescent Society (TRCS) and the Turkish armed forces also play a role in operations planning and disaster preparedness. See Section 1.2.4 for a description of their role.

No international standardisation approach is used or adopted. Standardisation in the operation planning process is limited with the exception of the provincial response plans. Provincial level stakeholders indicate that a higher level of detail and standardisation was foreseen at the beginning of the process; however this has not been pursued in practice.

Military support is anticipated in all provincial plans for all emergency situations, as foreseen in the relevant regulations. See Chapter 3 for discussion of TAF involvement in Turkish disaster management.

²⁴⁵⁵ UNDP/WMO, "IPA Needs", p. 19-20. It should be noted that the Disaster and Emergency Response Plan for Istanbul represents an extremely high level of preparedness within the IMM. For more information, see Istanbul DED, "Istanbul ADMIP: Disaster and Emergency Prevention, Response and Recovery Plan," June 2014. Available <http://www.guvenliyasam.org/Contents/rehber-kitaplar/en/ADMIP-EN.pdf>.

4.3 Logistics support in crises

Private logistics providers are involved in crises situations. For example, private sector facilities such as cool silos and other special facilities are anticipated for use in the event of an emergency. Other private sector providers of logistics support include the Istanbul Bus Company (İETT) and Istanbul Sea Buses Company (İDO). The companies have made preparations for evacuating people from disaster areas to safe places (UNDP/WMO, 2011).

Military logistics support is also anticipated. The Turkish Armed Forces, for example, maintain logistic support coordination centres to ensure timely response in the event of emergencies. During the Van Earthquakes (2011) the use of military planes was made available for delivering SAR forces and other rescue workers, equipment and aid (e.g., blankets, tents, etc.).

Logistics support is also provided through non-governmental providers, such as TRCS, which has a disaster response and assistance unit consisting of 5 branches: Disaster Preparedness and Planning Unit, International Disaster Response Unit, Operational Unit, Logistics Unit, Psycho-Social Support Unit. These units maintain several logistic depository facilities with stocks of tents, food and blankets in each province, airport and harbour that support its emergency operations. These include a tent production facility and storage facilities distributed around the country to provide logistics support in the event of a disaster (one central storage in Ankara and satellite storages in seven other provinces) (Ganapati, 2008).

4.4 Crisis communication to general public; Alert system; Public Information and Warnings

The monitoring, notification and warning systems are comprised of several networks, notification centres and early warning. A national coordination body has been established and early warning and communications systems that are in place for immediate threat of disaster are well developed. Figure 81 shows the intelligence and dissemination system as defined in the AFAD Strategic Plan 2013-2017.

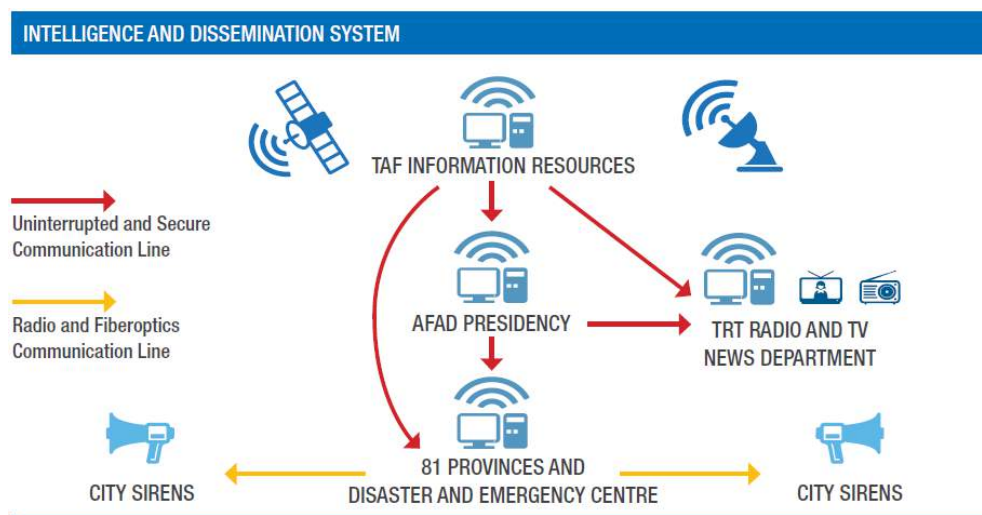


Figure 81: Intelligence and Dissemination System ²⁴⁵⁶

Regarding crisis communication to the public,

Warnings for the public are issued for a variety of parameters, all of which cause damage to life, property and infrastructure – examples of these are strong precipitation, hail, storms, cold and heat waves, coastal and sea area warnings, sand and dust storms, and forest fires. The messages outline possible risks such as flash flood, landslides, lightning and hail for a strong precipitation event. ²⁴⁵⁷

Networks and forecasting

Two main networks exist to record land deformations to forecast seismic risks. These are the **National Telemetric Earthquake Observation Network (TURKNET)** and the **National Earthquake Monitoring Network**. TURKNET is monitored by the Seismology Division housed in AFAD and consists of 24 stations dispersed across the country. ²⁴⁵⁸ The National Earthquake Monitoring Network is operated by KOERI and consists of 116 broadband and 22 short period seismometers and a satellite system, all of which support real-time communication. Additional data from 72 stations is provided through agreements with neighbouring countries. ²⁴⁵⁹ DMI and DSI (see 3.1.1) operate early warning systems in Turkey for all hydro-meteorological risks.

The DMI Observation Network prepares short and longer term weather predictions and is extremely dense, encompassing:

- 257 hydro-meteorological stations,
- 132 synoptic stations,

²⁴⁵⁶ AFAD, 2012a, Strategic Plan 2013-2017

²⁴⁵⁷ UNDP, 2011, "Disaster Risk Reduction Capacity Assessment Report: For Turkey," UNDP, Bureau for Crisis Prevention and Recovery.

²⁴⁵⁸ For more information, SEBA Hydrometric, Turkey Emergency Flood and Earthquake Recovery Project, < <http://www.seba-hydrometrie.de/en/reference-projects/tefer-turkey.html>>.

- nearly 500 automatically transmitting radio sonde stations,
- 118 lake observation systems,
- 150 snow stations,
- 330 meteorological stations; and,
- 1,000 water quality and sedimentation measurement stations

The DSI network comprises:

- 710 precipitation stations,
- of which 357 are currently operational and
- 1,176 discharge measurement stations.

The equipment used by DMI and DSI for data communication and dissemination of warnings is described in Figure 82 below.

Telecommunication equipment	To receive data	To send data	To send warnings	To send products
Telephone				
Mobile Phone				
SMS			DMI	
GPRS	DMI			
PSTN	DMI			
Telefax				
Dedicated Leased Lines				
UHF radio transceiver				
High frequency/Single side band radio				
HF Radio Email				
Aeronautical Fixed Telecommunication Network				
Very Small Aperture Terminal				
Data Collection Platforms used to transmit data from AWSs				
Global Telecommunication system (WMO-GTS)				
Meteosat Second Generation Satellite system				
Other satellite systems				
Internet	DMI		DMI	
Email				
Post/mail				
Print media				
TV –national				
TV-commercial				
Radio			DMI	
Bulletins				
Printed text				
Manual collection	DMI			

Figure 82: Equipment in use for data communication and warnings and other products dissemination²⁴⁶⁰

²⁴⁶⁰ WMO, 2012, “Meteorological, Hydrological and Climate Services to Support Disaster Risk Reduction and Early Warning Systems in Turkey.” In *Strengthening Multi-Hazard Early Warning Systems and Risk Assessment in the Western Balkans and Turkey: Assessment of Capacities, Gaps and Needs*, 195-224.

5 Capabilities

5.1 Human resources

The number of personnel cadres assigned to the Presidency is 515. As of the writing of the AFAD Strategic Plan document 2013-2017, the total number of personnel employed in the Presidency is 447. Of this, 322 are permanent employees while the remaining 125 are temporary.

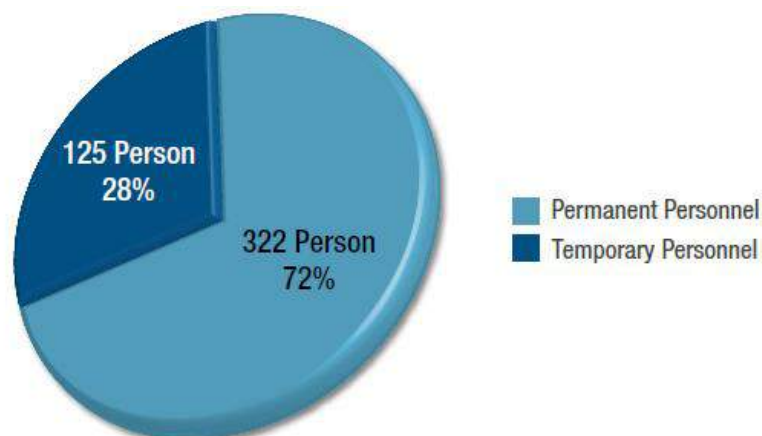


Figure 83: General Personnel Status of the Presidency²⁴⁶¹

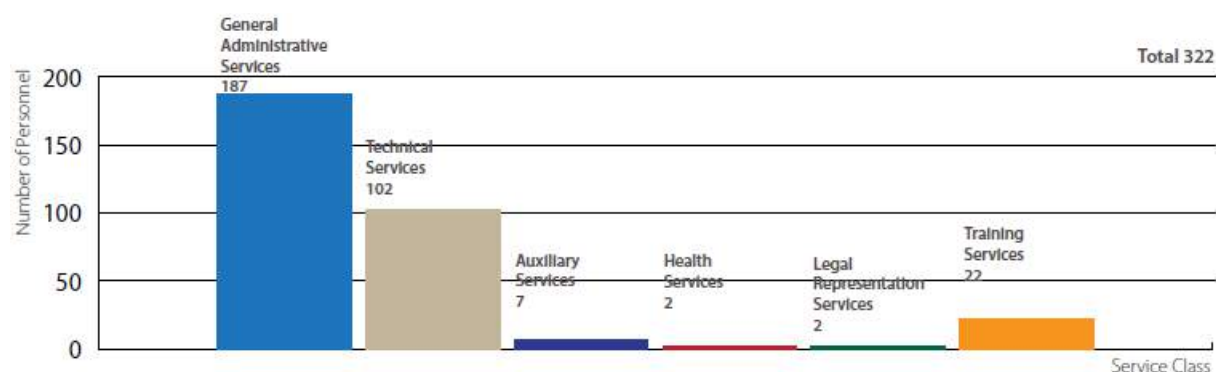


Figure 84: Distribution of Permanent Personnel as per Service Classes²⁴⁶²

The personnel composition structure of the Presidency is mainly comprised of disaster management experts, engineers from related disciplines, instructors, technical staff and administrative staff (AFAD 2014). At the provincial level, staff is predominately comprised of search and rescue professionals and a smaller number of technical staff.²⁴⁶³ Stakeholders in the country indicate, however, that the capacity to mobilize is dependent upon the situation.

²⁴⁶¹ AFAD, Strategic Plan 2013-2017

²⁴⁶² Ibid.

²⁴⁶³ For example, in Ankara, the provincial directorate staff is made up of 100 search and rescue professionals and 20 technical staff (e.g., engineers, mechanics, health and administrative staff).

In addition to the Presidency's staff, "[a] stand-by operative network" comprised of well trained staff from the General Directorate of Civil Defence, the natural disasters search and rescue battalions, regional disaster commands and natural disaster assistance troops subordinate to the Turkish Armed Forces, as well as a network of volunteers from the TRCS and other NGOs is ready to intervene in the event of a disaster (UNDP/WMO, 2011). The armed forces are involved mainly through the implementation of their Emergency Assistance Plans (See 1.2.4). In addition, they carry out search and rescue activities and provide services related to security, health, shelters, transportation, communication, and service to basic needs of victims (Ganapati 2008).

NGOs are mainly involved in search and rescue operations. Among the major NGOs involved in the field of disaster and crisis management in Turkey are the search and rescue association AKUT, the Neighbourhood Disaster Support Group (MAG), the Disaster Preparedness and Earthquake Training Association and, most importantly, Turkish Red Crescent Society (TRCS).

- **AKUT** is the first volunteer search and rescue organisation. AKUT has 9 regional offices and is increasingly supported through volunteer participation and fund-raising activities.
- **The Disaster Preparedness and Earthquake Training Association** is the only organisation with a central focus on disaster prevention and mitigation rather than on protection and rescue. The association aims to increase community awareness through training activities that cover disaster awareness, environment and water awareness, fire prevention as well as first-aid and search and rescue training aimed at children, families and municipalities. The trainings are certified by the Ministry of Health.
- **TRCS** is an NGO with a special status and strong legislative links to the Government and funding due to its role at the national, provincial and local levels. It has national, provincial and district level committees that are heavily involved in disaster preparedness through the conduct of public awareness and training activities. In October and November 2011, the TRCS successfully mobilized and deployed 986 of its staff for the response operation. (UNDP/WMO, 2011).

These NGOs are also members of the National Platform established in March 2011 (See also Section 3.1). The GEA Search and Rescue Group²⁴⁶⁴ is also members of the Platform.

Foundations, which are under the oversight of the General Directorate of Foundations, support the Government with research efforts, training and education, and public awareness activities. The Environment Foundation of Turkey²⁴⁶⁵ is particularly active in the field as a member of the National Platform, as well as through its dissemination of materials on public training and awareness and the organisation of national and international conferences.

Professional organisations which are active in disaster and crisis management include the Chamber of Geological Engineers, the Chamber of Geophysical Engineers, the Chamber of Civil Engineers and the Psychiatric Association of Turkey as well as the Chamber of Architects, the Chamber of Commerce and the Chamber of Medical Doctors. The first four are also members of the National Platform (UNDP/WMO, 2011).

²⁴⁶⁴ GEA Search and Rescue Group, <http://www.gea.org.tr/?lang=en>.

²⁴⁶⁵ Environment Foundation of Turkey, <http://www.cevre.org.tr/>.

From the private sector, the following are represented in the National Platform: the Turkish Industrialists' and Businessmen's Association, the Union of Chambers and Commodity Exchanges of Turkey, the Turkish Contractors Association as well as the General Directorate for Press and Information, the Turkish Association of Journalists and Turkish Radio and Television Cooperation. Commercial enterprises are increasingly investing in business continuity services designed to assess and then mitigate physical and or operational risks. The importance of public-private partnerships for disaster management has been stimulated by the combination of building codes and reinsurance rates. (ibid).

5.2 Materiel (non-financial) resources

AFAD has warehouses and equipment available from the moment an earthquake hits. At the provincial level, a number of provinces have established large warehouses for the storage of necessary stock and equipment, such as containers, tents, blankets, kitchen utensils, clothing, etc. In Istanbul, for example, a year's supply of medicine and equipment is ready on stand-by and replenished annually; portable toilets procured, and; tent areas identified and water and sewage infrastructure completed. The Istanbul Emergency Aid and Lifesaver Directorate put together 2,500 emergency aid kits to use in the early stage of response. IMM's Emergency Aid and Lifesaver Directorate also has 20 emergency response stations and 29 ambulances available to it. Ankara does not yet have such a warehouse as described above, but plans are ongoing. The exact levels (numbers) of provincial stocks are not publicly available.

Provision is made in administrative law for the mobilisation or commandeering of private assets during a crisis. Certain provisions are made for governments to mobilise or commandeer private assets during crises, as in Law no. 7269. Assets can be mobilized in a number of ways, such as through hiring and appropriating.

Regarding the involvement of military assets, in Ankara, for example, the provincial level has access to the aerial capacities of the law enforcement agencies in Ankara through the governorate. The planned use of other military assets, either at the national, provincial or municipal levels, is not clear. At the central level, AFAD has been developing projects with the National Police for the visual local identification and damage assessment.

The TRCS provides first aid and health services, distributes tents, foods and blankets to victims on the basis of its preparedness and intervention plans (information on the TRCS logistics support, including its tent production facilities is provided in section 4.3) (Ganapati, 2008).

A bread distribution organization plan has been developed for use during an earthquake. The plan is based on the results of studies on production, storage and distribution of 5 million loaves of bread "with high calories and good nutrition" (UNDP/WMO, 2011: 29). Istanbul Public Bread factories are able to make production with LPG.

5.3 Training

AFAD is responsible for education, training, and awareness-raising activities in the field of disaster risk reduction with the aim to target all relevant stakeholder groups at all levels, including decision makers, national and local officials from directors-general to experts working on disaster and emergency management, NGOs and the general public.

Within the framework of regular training for national level officials, provincial and district governors, an official report states

the General Training Department of the Ministry of Interior [...] has initiated seminars on disaster management for government officials. Officials are also trained through the [AFAD] Disaster and Emergency Training Centre. An agreement was signed between Istanbul Technical University and the Ministry of Interior of Turkey in 2001 for four projects: (i) Training on Emergency Management, (ii) Development of Turkish Fire Brigades, (iii) Development of an Emergency Management System and (iv) GIS Standards Based on Emergency Management. Moreover, the University has cooperated with the Ministry of Interior's Strategic Research Unit to develop training that is targeted at provincial and district governors. The Turkish Emergency Management General Directorate (now integrated into the [AFAD]) carried out three International Disaster Management Courses aimed at managers in government ministries, the police, the military, emergency services, non-governmental institutions and industry in partnership with Bournemouth University. Many new projects are currently in the start-up phase, two of them being the National Exercise Simulation Centre at the DEMP headquarters and the Centre of Excellence for the Training of Fire Brigades.²⁴⁶⁶

Certification is provided for relevant public officials and public employees, especially in the fields of search and rescue. This certification is also sought for public institutions to take part in drills and tests. No international standards are pursued; national rules and regulations are applied.

Provincial level directorates conduct and participate in provincial and departmental training exercises and provide regular trainings on search and rescue and civil defence for relevant public officials, as well as earthquake simulation exercises for professionals and the wider public. More specific information on this subject could not be identified within the context of this study.

The training of volunteers at the local and provincial level is held in SAR, non-structural mitigation and first-aid. For example, the Neighbourhood Disaster Volunteer (NDV) Programme was implemented by the Neighbourhood Disaster Volunteer Association with support from the government. As of 2011, more than 3,472 Neighbourhood Disaster Volunteers from 85 neighbourhoods located within the provinces of Kocaeli, Istanbul, Yalova and Izmir had completed the standard basic training programme and signed cooperation protocols with Civil Defence.²⁴⁶⁷

²⁴⁶⁶ UNDP/WMO, 2011, "IPA Needs", 17-18.

²⁴⁶⁷ www.mag.org.tr/eng/proje2.html

The “Safe Life Volunteers Campaign”, implemented within the framework of the Istanbul Seismic Risk Mitigation and Emergency Preparedness Project, offered 15 different training modules on disaster preparedness, including one child-friendly programme. More than 26,000 people have been reached since 2008 and all of the training material is made available to the public.²⁴⁶⁸

Since 2012, AFADEM offers a training for ‘Basic Disaster Awareness Trainers’ aimed at presenting a very systematic approach on top of previous efforts. The personnel of AFAD local organizations, Provincial Directorates of the Ministry of Youth and Sports and the municipalities have been trained under this programme. As of the HFA Monitor 2011-2013, trainings are planned for social services, the Turkish Red Crescent and the Union of Psychosocial Services in Disasters workers in order to reach vulnerable areas after disasters and to inspect disturbed psychosocial structure. (AFAD, 2013b).

5.4 Procurement

5.4.1 Procurement regulation

Background

Within the European legislation three different procurement directives apply, which are mutually exclusive, meaning that only one of the directives apply to public procurement. Two of the three directives are topic specific, the first relating to the procurement of energy, water, transport and postal goods and services and the second one relating to the procurement in the defence and security industry. If none of the specific directives apply the general public procurement directive will apply. It is vital to know which of the three directives apply to the procurement of CM tools and services as the three directives have different procedures and thresholds.

Not all goods and services need to be publicly procured. First of all, contracts with values below the specified thresholds do not have to be procured. The thresholds differ between the directives as well as between goods and services (including trainings). Also some of the articles are not compulsory and Member States can choose not to implement these articles. On the other hand the directives provide minimum rules and Member States can opt to maintain stricter rules as long as the stricter rules are non-discriminatory. Therefore quite some differences might exist between the procurement schemes within Member States and this can influence the adaptation of CM tools and services in the different MS.

This project revolves around the procurement related to crisis management. This is for example the procurement of ambulances, emergency packs or training. In Turkey there is a procurement law which applies to the procurement of goods and services. This section will explain the scope of the procurement law, the award procures and the evaluation of tenders.

Scope

²⁴⁶⁸ www.guvenliyasam.org ; www.beyazgemi.com.tr; All of these projects have been conducted by Beyaz Gemi Training and Consulting. See UNDP/WMO, 2011.

The Turkish public procurement law applies to the procurement of goods, services or works of which the costs are paid from resources of the public administrations included in the general budget, state economic enterprises and social security establishments etc. that are assigned with public duties (article 2). This is only the case if the estimated value of the project is above the threshold value. The threshold values are:

- Three hundred billion Turkish Liras for procurement of goods and services, operating under the general or the annexed budget;
- Five hundred billion Turkish Liras for procurement of goods and services by other contracting authorities within the scope of the PPL;
- Eleven trillion Turkish Liras for the works by any of the contracting authority covered by the procurement law.

Furthermore, the procurement law does not apply to all goods, services and works of these public organisations. Article 3 makes an exception for several types of procurement, for example: procurement related to defence, security or intelligence that need to be treated confidentially; procurement which is pursuant to international agreements and have foreign financing and the institutions covered by law; procurement necessary for research and development projects, executed or supported by national research and development institutions; drafting emergency response plans and procurement of services etc., which are urgently needed to decontaminate the sea environment. Furthermore the procurement law does not apply when there is an urgent need that will come up in cases such as defence, security and humanitarian aid issues.

Award procedures

The contracting authorities are liable for ensuring transparency competition, equal treatment, reliability, confidentiality, public supervision, and fulfilment of needs appropriately, promptly, and efficient use of resources. The contracting authorities can divide the procurement into lots, but this can't be done with the purpose of avoiding threshold values (article 5).

In the procurement of goods, the contracting authority can apply the open procedure, the restricted procedure or the negotiated procure.

In the open procedure, all tenderers may submit their tender (article 19). In the restricted procedure, only tenderers that are invited, following a pre-qualification by the contracting authority, can submit their tenders (article 20). This procedure can be used when the open procedure is not applicable, since the nature of the subject necessitates speciality and/or technology and in procurement works where estimated costs exceed half the threshold value. The pre-qualification shall be carried out in accordance with the qualification criteria.

The negotiated procedure may be applied when it is inevitable to conduct the tender procedures immediately, due to unexpected and unforeseen events or due to occurrence of specific events relating to defence and security. More over the procedure can be used when the procurement is requiring a research and development process; the procurement has specific and complex characteristics or procurements with an estimated costs up to fifty billion Turkish Liras (article 21). In this procedure, the tenderers who are accepted as qualified may submit their initial proposals. This

does not include prices on aspects such as technical details and realization methods. The contracting authority shall then interview each tenderer on the best methods and solutions. After this interview, the tenderers will submit their proposal, including a price offer.

In several cases, the contracting authority can use direct procurement, for example when the goods and services can only be supplied by one natural or legal person; when the procurement has a low value or when the procurement is related to medicine (article 22).

Evaluation

The tenderers whose tenders are not in compliance with the requirements of article 36 shall be excluded from the evaluation proceedings (article 37). If the information is not crucial for the tender, the contracting authority may request the tenderer to complete the information. The tenderer shall be examined for their conformity with the qualification criteria, determining the capacity of the tenderer to perform the contract as well as the conditions set forth in the tender document. Tenders that are abnormally low shall be evaluated on economic nature of the manufacturing process and the methods of work; selected technical solutions and advantageous conditions utilized by the tenderer and the originality of the works proposed (article 38).

The tender shall be awarded to the tenderer with the economically most advantageous tender. This is determined solely on the basis of the price or together with the price by taking into account the non-price factors. When the price is the only determination factor and two or more tenderers have the same price, the evaluation will also take the non-price factors into account. If non-price factors play a role in the evaluation process, these factors must be expressed in monetary values (article 40).

5.4.2 Procurement procedures

Background

The European directives provide the legal boundaries for procurement, but they do not fully regulate the procedures followed. Other projects done show that the actual procedures can differ between Member States. It is important to understand whether the procurement activities are carried out by a civilian or military organisation. Also insight in their public procurement procedures (which are often defined at a national level) provides a good overview of the different practises.

Crisis management will not be limited to EU-28 countries and neighbouring countries might also be affected. Procurement in these countries is not covered by the EU directives and therefore it is important to have some insights in the procurement practices in these neighbouring countries.

5.5 Niche capabilities

Niche capabilities of Turkey's AFAD include: Campsite construction and canine-assisted search and rescue for earthquakes and avalanches.

Resources

Legislative acts

Development Law (No. 3194) [Imar Kanunu] (effective by 9 May 1985), Basbakanlik. Available <http://mevzuat.basbakanlik.gov.tr/mevzuat/metinx.asp?mevzuatkod=1.5.3194>.

Law on Building Inspection (No. 4708) [Yapi Denetimi Hakkında Kanun] (effective by 13 July 2001), *Resmi Gazete* Available <http://rega.basbakanlik.gov.tr>.

Law on Civil Defence (No. 7126) [Sivil Savunma Kanunu] (effective by 13 June 1958), Sivil Savunma Genel Mudurlugu Available <http://www.ssgm.gov.tr/mevzuat/mevzuat.html>.

Law on Measures and Assistance to be Put into Effect Regarding Disasters Affecting the Life of the General Public (No. 7269) [Umumi Hayata Muessir Afetler Dolayisiyle Alinacak Tedbirlerle Yapilacak Yardimlara Dair Kanun] (effective by 25 May 1959), in *Kanunlar Yonetmelikler ve Kararnameler*, Afet Isleri Genel Mudurlugu, Ankara, 2000.

Law on Metropolitan Municipalities (No. 5215) (effective date 7 October 2004), Official Gazette No. 25531. Accessed 17 October 2014.
http://www.migm.gov.tr/en/Laws/Law5216_MetropolitanMunicipalities_2010-12-31_EN_rev01.pdf.

Law on Municipalities (No. 5272/No. 5393) [Belediye Kanunu] (effective by 24 December 2004), *Resmi Gazete* Available <http://rega.basbakanlik.gov.tr>. Accessed 17 October 2014.
http://www.migm.gov.tr/en/Laws/Law5393_Municipality_2010-12-31_EN_rev01.pdf.

Law on the Organisation and Functions of the Disaster and Emergency Management Presidency (effective date 17 December 2009). *Official Gazette* No. 5902.

Law on Special Provincial Administration (No. 5302), (effective date 2 February 2005) In the *Official Gazette* No. 25745. Accessed 17 October 2014.
http://www.migm.gov.tr/en/Laws/Law5302_SpecialProvincialAdmin_2010-12-31_EN_rev01.pdf.

Law on State of Emergency (No. 2935) [Olaganustu Hal Kanunu] (effective by 27 October 1983), in *Kanunlar Yonetmelikler ve Kararnameler*, Afet Isleri Genel Mudurlugu (T.C. Bayindirlik ve Iskan Bakanligi), Ankara, 2000.

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Regulation on Voluntary Participation in Services of Special Provincial Administrations and Municipalities (2005, Official Gazette Issue: 25961, Art 5). Accessed 12 November 2014.

http://www.migm.gov.tr/en/Regulations/Reg_VoluntaryParticipationInSPA&MunicipalServices_2010-12-31_EN_rev01.pdf

Other normative acts

Decree on Basic Principles Related to Disasters Affecting the Life of the General Public [Afetlerin Genel Hayata Etkinligine Iliskin Temel Kurallar Hakkinda Yonetmelik] (effective by 21 September 1968), in *Kanunlar Yonetmelikler ve Kararnameler*. Afet Isleri Genel Mudurlugu, Ankara, 2000.

Decree on Working Procedures and Principles of Natural Disasters Insurance Administration (No. 246000) [Dogal Afet Sigortalari Kurumu Yönetim Kurulu Çalış, ma Usul ve Esaslari Hakkinda Yönetmelik] (effective by 1 December 2001), Dogal Afet Sigortalari Kurumu. Available <http://www.dask.gov.tr/daskhakkinda/yonetmelik.htm>.

Decree with the Power of Law on the Mandatory Earthquake Insurance (No. 587) [Zorunlu Deprem Sigortasi Hakkinda Kanun Hukmunde Kararname] (effective by 27 December 1999), Dogal Afet Sigortalari Kurumu <http://www.dask.gov.tr/daskhakkinda/mevzuat.htm>.

Directive on Conditions of Participation of Volunteers in Civil Defence Service [Gonullu- lerin Sivil Savunma Hizmetlerine Katilma Esaslari Yonergesi] (effective by 2000), Sivil Savunma Genel Mudurlugu. Available <http://www.ssgm.gov.tr/mevzuat/mevzuat.html>.

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Online resources (e.g. websites of key CM organizations)

AFAD website, <https://www.afad.gov.tr/EN/>

AFAD, Department of Earthquakes database. Available: <http://www.deprem.gov.tr>.

Beyaz Gemi Training and Consulting. Available: www.beyazgemi.com.tr,

Disaster Management Information System. Available: www.secure-ifrc.org

EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be - Université catholique de Louvain - Brussels – Belgium.

Environment Foundation of Turkey. Available: <http://www.cevre.org.tr/>

GEA Search and Rescue Group. Available: <http://www.gea.org.tr/?lang=en>.

Neighbourhood Disaster Volunteers, Available. www.mag.org.tr/eng/proje2.html

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Expert interviews

Expert Interview, Provincial Disaster and Emergency Directorate of the Ankara province, November 2014.

Please only mention here the organisation and month of the interview. Only refer to "expert interview" in the text.

Statement from the informed consent form to be sent to the interview partners: *"The results will be published with no possibility to trace the individual views and arguments from the participant. Only the organization name will be mentioned in a list under resources / expert interviews. The limited personal information gathered will be handled under confidentiality and will duly be respected."*

Please store any personal data separately from this survey, if it is confirmed by the interview partner to be included in the Driver community of interest.