



**Driving** Innovation in Crisis Management for **European Resilience**

## D130.12 - Minutes of the Ethical and Societal Advisory Board 2

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Ethical and Societal Advisory Board, Societal Impact Assessments, Research Ethics, SIA framework

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## List of Acronyms

| Abbreviation / acronym | Description   |
|------------------------|---|
| CM                     | Crisis Management   |
| D                      | Deliverable   |
| DOW                    | Description of Work   |
| DRIVER                 | Driving Innovation in Crisis Management for European Resilience                   |
| ESAB                   | Ethical and Societal Advisory Board   |
| M                      | Month   |
| NSD                    | Norsk Samfunnsvitenskapelig Datatjeneste (Norwegian Social Science Data Services) |
| SIA                    | Societal Impact Assessment  |
| SP                     | Sub Project   |
| WP                     | Work Package  |

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## 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.

DRIVER is a 54 month duration project co-funded by the European Commission Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 607798.

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## Executive Summary

The Ethical and Societal Advisory Board (ESAB) is an independent committee that advises DRIVER, and in particular SP, about ethical challenges and societal aspects of crisis management and research done throughout the project. The second meeting of the DRIVER Ethical and Societal Advisory Board was held on 21<sup>st</sup> September 2015 at the premises of PRIO in Oslo. The meeting's purpose was to update the Board on the status of the project, in terms of the effort on research ethics, but also to introduce the concept of Societal Impact Assessments (SIA). Feedback on particular questions relating to ethical issues from year 1 of DRIVER was solicited (i.e. the first Ethical Monitoring Report-D95.31 & the general ethical monitoring process). The introduction of the SIA was followed by a discussion on the societal impact criteria, where the Board provided valuable feedback on the criteria. The board has, beyond the scope of the meeting, commented on the societal impact assessment criteria and came back to PRIO about specific questions concerning research ethics. Both kinds of feedback are included in these extended minutes.

*Due to the restructuring process, the activities of WP95 after the first year have being forwarded to SP1 and SP8. Some of the references to SP9 activities may lay under those SPs after M12.*

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# 1 Introduction

## 1.1 Meeting agenda

| Time   | Topic  | Speaker                |
|--------|--|------------------------|
| 13 :00 | Welcome  | PRIO, Peter Burgess    |
| 13:15  | Reminder: What happens where in DRIVER?<br>Update on SP9 Activities & next Steps   | PRIO, Mareile Kaufmann |
| 13:35  | Activities on Research Ethics  | PRIO, Stine Bergersen  |
| 13:50  | Preliminary results of the Year 1 Review   | PRIO, Peter Burgess    |
| 14:10  | Issues brought up in the Ethical Monitoring Report <ul style="list-style-type: none"> <li>- Introduction to the report</li> <li>- <b>Three issues mentioned by partners:</b></li> <li>- <i>What is the difference between sensitive and non-sensitive data?</i></li> <li>- <i>Where and how to store personal data?</i></li> <li>- <i>Are there alternatives to a “formalization” of Research Ethics?</i></li> </ul> | PRIO, Stine Bergersen  |
| 15:15  | <i>Coffee Break</i>  |                        |
| 15:30  | An introduction to the DRIVER Societal Impact Assessments <ul style="list-style-type: none"> <li>- What is the aim of the SIA &amp; How does it work?</li> <li>- Discussion about the list of criteria:</li> <li>- <i>Are they formulated accurately, in a language that appeals to end users?</i></li> <li>- <i>Are criteria missing?</i></li> <li>- <i>Could some criteria be taken out or merged?</i></li> </ul>  | PRIO, Mareile Kaufmann |
| 16:30  | Sum Up with Conclusions & Action Points<br>Organizational matter, open questions & way ahead   | PRIO, Mareile Kaufmann |
| 17:00  | <i>Closing</i>   |                        |

Table 1 Agenda

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## 1.2 Attendants

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The following persons attended the meeting:

| Name                  | Organisation                      |
|-----------------------|-----------------------------------|
| Peter Burgess         | PRIO                              |
| Mareile Kaufmann      | PRIO                              |
| Stine Bergersen       | PRIO                              |
| Helene Ingierd        | External Expert, Director of NENT |
| Katerina Hadjimatheou | Warwick University                |

**Table 2 Attendants**

*Excused:*

|                        |                     |
|------------------------|---------------------|
| Vasiliki Petousi       | University of Crete |
| Fernando Kraus Sanchez | Atos                |

**Table 3 Excused**

Petousi and Kraus were supposed to participate in the meeting via Skype, but due to a global crash on Skype [5, 6] a connection could not be established. An alternative conferencing system available at the meeting premises could not be used, since the counterpart would need the same equipment. Since no other suitable backup solutions were available on short notice, PRIO agreed to forward the minutes to Petousi and Kraus, and receive potential comments, questions and feedback in written form. These comments are incorporated in this document.

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## 2 Discussions

The PowerPoint presentations given by PRIO are included in the annex. Below is a summary of the key points raised in the discussions.

The meeting started with the SP leader welcoming the Board members, and giving a report of the Year 1 Review, both in terms of overarching issues for the project as a whole (number of deliverables, complexity, lack of narrative and focus etc.), and particular issues/ implications for SP9 (merging of deliverables, potential rejection of D94.1, new structure and leader of especially WP94). This orientation on the review was given before the actual review report was received. The Board wished to see the Review Report when it is ready, and PRIO will assess whether this is possible or if it is confidential to the project.

### 2.1 Update on SP9 Research Activities & DRIVER as a whole

Mareile Kaufmann gave a presentation of the structure of the project as a whole, explaining once again the role of SP9 and how the subproject works as a part of the project, including delivery of deliverables and the work package structure (for details, see the PowerPoint presentation in annex). The presentation was designed to update the Board on what happens where in the project, and where the SP9 activities are placed within the project, discussing responsibilities and overlaps with other SPs. For that matter, the project's structure and the subproject's workpackages were iterated. Also, a preliminary version of the new DRIVER pitch which was developed in the preceding week during the Berlin PMC meeting was presented to clarify each subproject's role within DRIVER. Since the ESAB mainly focuses on SP9 issues, the "double role" of SP9 (research ethics & societal impact) was emphasized. While the first meeting with the ESAB in December 2014 focused mainly on the research ethics as part of SP9, this meeting strengthened the board's focus on the societal impact side of SP9. An update was given about the SP9 work done since the last meeting. There was no further discussion related to this point.

### 2.2 Activities on Research Ethics

Stine Bergersen gave a presentation of the activities on research ethics from the first year (for details, see the PowerPoint presentation in annex). The different activities that SP9 have carried out in its role as the independent monitor of research ethics in DRIVER were presented. Amongst other things, this included e.g. the delivery of the ESAB minutes from December 2014, and the Project Officer's feedback from the first ESAB meeting, and the actions SP9 has taken to answer to this feedback.

The Project Officer's feedback included the following:

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- The ESAB is highly valued as an independent committee.
- It is challenging that not all the partners are at the same level of understanding when it comes to research ethics (various experience and familiarity with research ethics).
- Approval is needed before the start of the research activity, or at least as soon as the partners (the task leader) know the design of the activity.
- Collected “packages” of approvals should continue being forwarded to the Commission.
- In general, there is a need for clear and practical procedures, which stress that it is the task leaders’ responsibility to obtain the correct and relevant approval

In response to this, PRIO has done the following, which was presented to the Board:

- A workshop on research ethics was held by the SP9 leader during the General Assembly at the DRIVER meeting week in Ispra in February 2015.
- A letter was drafted by PRIO and sent by the Project Coordinator to the full consortium to sharpen the tone, to reiterate the procedures for ethical approvals, and once more clarify the different responsibilities. The letter also contained references to all relevant deliverables, as well as all the relevant templates for data protection approvals and informed consent.
- In addition, throughout the year, bilateral follow-up and discussions have been carried out with the partners needing it. Several reminders of deadlines have also been given, both collectively and individually.
- PRIO is currently collecting the approvals for the next round of approvals, which are due in October 2015.

Overall, some partners are concerned with demonstrating best practice, while others still need to be individually reminded about the necessity for approvals. The process as a whole requires a lot of dialogue and flexibility, mainly because many of the activities by the partners are still under planning, making it difficult to determine if and what kind of approvals might be necessary. In addition, many of the partners are either not used to dealing with rigid research ethics guidelines, or not used to dealing with it for the kind of activities carried out within DRIVER. In sum, research ethics still needs a lot of follow-up, which the team at PRIO, together with the coordinator are trying their best to accommodate for within the scope of their available person months and beyond.

One question to the Board was how the ethical component of SP9 can be further strengthened, and how to keep fostering the awareness of research ethics with the least amount of stress and extra work for all partners, as well as for SP9.

Since the Board acknowledged that it is already a lot of work to oversee and uphold a minimum threshold for research ethics, i.e. a lot has already been done to inform the consortium, it was difficult to give advice about this particular point. One approach could be to observe whether there is a pattern in who gets back to PRIO first and then target those who are slower in their response specifically. Expectably for companies that are not used to deal with academic work, but rather operational crisis management research, the procedures will certainly be less familiar.

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However, no such pattern could be observed just yet, but should it emerge in the future, PRIO will follow this advice.

Furthermore, the Board mentioned the following points about the larger topic of approvals from data protection authorities:

- PRIO will over the years get an overview of data protection approval procedures in the different countries. Such an overview does not exist as of now. Through that, the collected forms and documents about the procedures could be of value beyond the project's scope. PRIO answered that this is true, but procedures and forms are currently held in the respective country's language. In addition, there are already too little person months to do the classic in- depth individual follow up. Thus, there is unfortunately no person month effort available to create a more generic "overview of approval procedures".
- There is a new European Directive for Data Regulation coming. PRIO will pay attention to this and check whether it impacts DRIVER's work.
- The Board pointed to the danger of "ethics dumping": should there be different standards in research ethics across Europe, application procedures are often "dumped" on the partner with least difficult procedure. PRIO: Following the approval procedures as per task (through the task leader) – as done in DRIVER - avoids such a problem, unless this was already taken into account in the planning of the project, which cannot be expected. Should PRIO face the case where it is unclear who should be applying for approval, it will follow the Board's advice to encourage those partners with expectably the highest national standards to apply in their country. Through that, a best practice in research ethics can be guaranteed.
- It cannot always be expected that data protection authorities make a full review about an application, or gives an "approval" as such. For many authorities it suffices to apply. PRIO has had the same experience and in such cases forwards the submitted application or the reply of the respective authority.

### 2.3 Presentation of the Ethical Monitoring Report- D95.31 (Stine Bergersen)

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The first Ethical Monitoring Report was submitted in April 2015, and it included the feedback from over 25 DRIVER partners. The report addresses key ethical issues from Year 1 of DRIVER, and the most challenging ethical issues as seen by the partners and by SP9. The presentation of the report included a description of the sources of information in the report (mainly a questionnaire filled out by all the partners), and some key findings mentioned in the report (for details, see the PowerPoint presentation in annex). It was stressed that the questionnaire distributed to the partners in order to solicit input was also an awareness-raising exercise, since it was clear that not all of the partners indicated in the DRIVER Description of Work had actually started the activities that need ethical approvals. Therefore, the questionnaire also asked some more general questions that might be useful for the partners to reflect upon during coming planning of e.g. experiments. It was also stressed that only 0.2 PMs are set aside for this task as per DoW, which is not much, given that the input from over 25 partners needed to be sensibly integrated into the report.

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The following problem was discussed: Does the informed consent form hamper a methodologically intended moment of surprise in the DRIVER exercises/ experiments?

It was presented that for some partners it was difficult to obtain informed consent in advance of the activity, since the activity should contain an element of surprise in order to be realistic (e.g. the use of different scenarios in the exercises). The Board was asked to give advice on this point.

The Board's answer: in general, as much information as possible should be given in advance. It is also possible to obtain consent after the activity for *special cases*. The Board also stressed that the deciding factor is the proportionality of the stress that participants are exposed to: the bigger the potential harm, the more is there a need to justify why participants cannot be informed in advance. For example, testing an alarm in a public space without informing the public in advance is not possible. In other words, there have to be good reasons for keeping information from the participants. The participants would also need a proper debrief, and their consent is still crucial. The Board has further pointed out that in general, people will need to be informed beforehand, but they don't need to know what exactly is happening in the scenario; there still can be an element of surprise.

In addition, the Board pointed to the following aspects:

- If an experiment is planned for a semi-public space, potential distress of bystanders should be minimized by putting up informative posters.
- Collecting informed consent via a form in an application on a mobile phone is unsatisfactory in terms of how much information can be included in the form's text. People always tick boxes on phones fast and without reading the full terms and conditions.
- Never expose people to a potentially alarming situation without getting at least a general consent.
- Provide de-briefs for participants afterwards.
- Generally, experiment scenarios should be reviewed by their planners vis-à-vis potential ethical problems. SP9 has no effort in Experimentation Design, but can be consulted for this matter. However, they will have to be contacted by those planning the experiments in due time. Again, the respective task leaders are responsible for ethical provisions.

The 95.31 Ethical Monitoring Report questionnaire also asked what SP9 can do better in terms of research ethics. Some suggestions were made:

- Design a checklist for experiments to identify whether one needs approval
  - PRIO: PRIO has been contributing with a checklist-style section in the Experiment Design Manual in WP23, making research ethics mandatory for everyone dealing with experiments. PRIO will also contribute with more refined versions in the follow up deliverables in WP23, and contact with SP2 has been continued. In addition, the Ethical Monitoring Report reiterated the guidelines and the templated necessary for fulfilling the ethical requirements.

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- Less theoretical information and less “concepts”, and more recommendations in “action form”.
  - PRIO: This is a challenge, and difficult to tailor to the different needs and levels of experience of the 37 DRIVER partners, but SP9 has, since the first deliverable submitted in M6 of the project, aimed at providing guidelines and routines in understandable and applicable form. See also the answer in previous bullet point. The ESAB as well as PRIO understand that partners will have to be sensitized long-term. A use of small scenarios and examples to explain difficult situations is recommended, e.g. why anonymization is important or why participants need to be informed.
  
- Establish a contact point in each country to deal with local authorities.
  - PRIO: This is simply not possible, due to restricted resources. It is impossible for SP9 to interpret the legislations in all the different partnering countries. However, a list with the contact information to the different European DPA’s (which are the entities actually in charge of making decisions with regards to research approvals) was provided in D95.31. Additionally, such a point of contact would undermine the general responsibility of the task leader to deal with and organize research ethics him- or herself.
  
- SP9 should review the design of the experiments before applications (to the DPA) are submitted.
  - PRIO: This has been followed up bilaterally in difficult cases, and PRIO have been available for questions the whole time. Reviewing every approval is, however, not a standard a) because of restricted resources and b) because approval applications are written in the respective country’s language.

Another question in the report was how SP9 has influenced the work of the different partners. These are the points that the partners raised. SP9 contributed to:

- ...practical guidance & awareness-raising.
  - PRIO: the first step in giving practical guidance in relation to research ethics is to raise awareness of which activities might need approval. Therefore, practical recommendations in “action form” must follow after an introduction of the concept of research ethics.
- ...encouragement.
  - PRIO: for some partners, research ethics is new, or stricter than in previous cases.
- ...no direct impact, yet.
  - PRIO: this was usually due to the activities which might demand approval, have not started yet.

Finally, the report asked the partners for potential issues that could be raised to the ESAB:

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- What is the difference between sensitive data and “normal” data, and how do the requirements for secure storage vary for the two types of data?
  - PRIO: a definition of sensitive data (from legislation) was provided by PRIO in D95.31 (e.g. political, philosophical, religious and sexual orientation; membership in unions, race, health). PRIO also underlined that the national DPA should be consulted in those cases.
  - ESAB: Agrees on the definition in D95.31. Further, for storing of sensitive data, some extra requirements are necessary. The Board will investigate this issue further, as this is a legal issue.
  - Board member Petousi commented via email: For partners to appreciate the definition of sensitive data it could be beneficial to point to the social consequences of data protection breaches, especially with regards to sensitive data. Here, one could describe sensitive data as data about individuals’ and groups’ characteristics which could potentially contribute to discrimination against such individuals or groups, make them social “outcasts”, stigmatize and marginalize them. Leaks of sensitive data could furthermore lead to a loss of health or other insurance benefits if specific characteristics and conditions become known or people could experience political repercussions in the context of repressive regimes.
  
- Are there alternatives to a “formalization” of Research Ethics?
  - PRIO: This is a general concern for some partners (becoming especially evident during the workshop in Ispra), and PRIO continues to stress that the requirements for research ethics is *not* an invention of SP9, but legal and contractual requirement for EU research. The Board was invited to give general comment and input on this issue.
  - ESAB: The Board suggested stressing the consequences of not having the appropriate procedures in place, in case something would happen to occur. Although it might seem very unlikely that something will happen, it is still a possibility that e.g. collected data might be misused or that participants may feel uneasy by not being informed properly of the activities. Generally, the partners will have to understand that ethics is not a matter for watchdogs, but for the legitimacy of the project, for building trust and for best practice. The Board will further investigate whether there is research on the influence of informed consent forms on the participation in research experiments. Generally speaking, none of the present members of the ESAB have experienced that participants say no to a research after they have been informed. Rather, the more information is given, the better and reassured participants are.
  - Board member Petousi commented via email: There is no way around the formal agreement by participants, but one lesson learned in the formulation of such requirements is to place less emphasis on the contractual and legal requirements and more on the building of trust and best practice. Legal and contractual obligations at least for some partners can be equated to “bureaucratic” requirements which can be fulfilled by ticking boxes, filling papers and providing permits and approvals. This is not a concern only for DRIVER (to quote Petousi: “On the contrary I believe that

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this is a project with genuine concern about ethics”), but the state of affairs with regards to ethics in research.

- If data collection, e.g. per drone, happens across different countries and data is stored in yet another country, who applies for approval?
  - Generally the task leader from the country where data is stored and used is likely to be responsible. In doubt, the data protection authority with the highest standards should be applied to. Given that this standard has been met, all other countries are likely to agree (best practice).
  - Drones will need aviation approval for all countries, but that is not SP9’s responsibility.
  - Before any application is issued, it is important to determine whether the drone collects data that allows for the identification of individuals, either because of high resolution or because the stored information allows for a deduction (e.g. by seeing someone in a specific environment or a specific group of people). If it can be confirmed that this is not the case, approval may not be necessary.
  - The ESAB will have to get back to this point in writing.

## 2.4 An introduction to the DRIVER Societal Impact Assessments (Mareile Kaufmann)

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Mareile Kaufmann gave a presentation about the meaning of societal impacts, and why societal impact assessments are important in DRIVER (see the annexed presentation for more details). This reflects the second role of SP9. Kaufmann introduced the criteria framework SP9 has developed for doing societal impact assessments based on crisis management functions.

Some key points from the presentation were:

- Crisis management (CM) is not just about presenting a set of solutions, but they have to be societally accepted.
- How CM can produce both positive and negative effects on society.
- Including the citizen into CM should work as an incentive. It is important not to overburden the citizens.
- There is generally a higher demand for societally friendly solutions.

Some key challenges when implementing societal issues into CM are:

- Weighing positive and negative solutions can be difficult, and some issues are unsolvable.

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- Societal effect is often disproportionate, long term, and very difficult to quantify (i.e. effects cannot necessarily be weighed against each other), which is why classic cost-benefit analyses are not a workable model for societal impact assessments.

This is why PRIO has developed the societal impact assessment framework as an awareness-raising or thinking-tool. An abstract of the framework for societal impact assessment was presented, explaining all its parts, and also how the particular criteria were selected (see the annexed presentation for more details). It foresees the assessments of particular functions using a set of carefully selected criteria. The grouping of the DRIVER CM functions was presented, and examples were given of how the framework can be put to use. In focusing on the level of functions, the framework seeks to be more versatile than assessing an already designed solution: one crisis management solution (that is being tested or experimented with in the project) can fulfil several functions. It is on the basis of these functions, that the societal impact assessments are made by SP9. A set of all the criteria, including their preliminary definitions, were handed out during the meeting (for the list, see annex), and the ESAB gave feedback on the setup and the content of the criteria. It was important for PRIO to establish that the criteria are not meant to calculate impact, and that it is not a cost-benefit-tool, but that the main aim of the framework and its assessments are to raise awareness about societal impact. The main aim of the feedback session was to ensure that the framework’s criteria are seen, recognized and to a certain extent validated by the ESAB.

### *Feedback on the criteria*

The question asked by PRIO was:

- how the societal impact criteria can be potentially revised,
- if they are complete,
- whether they cover all the relevant areas,
- if they are understandable, accurate etc.?

The ESAB gave valuable feedback on the set of criteria (the merged set of criteria, to be used both for assessing positive and negative impact in WP92 and WP93 deliverables):

- “Positive/ negative standardization”: This stands out. It is not yet entirely clear what it means. Standardization is “technology language”. It needs to be explained that it refers to political and societal processes, not to technical standards. Also, standardization is not a value.
- “Diversity” / “Cultural & Gender Sensitivity”: Is there an overlap here? PRIO: No. Diversity is describing the value of having a diverse society, whereas gender and cultural sensitivity is the principle not to make unfair decisions based on gender or cultural background. PRIO will add a sentence in the style of: A is different from B because....
- “Dignity/ non-discrimination”: Why are they together? Consider separating them and keep non-discrimination as a single criterion. Instead create a criterion: “Dignity and

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*autonomy*”- introduce *autonomy* as new criterion, which describes the self-sufficient human being. It could ask: can human beings be able to control their own life? E.g. If a drone is finding someone that doesn’t want to be found- this affects autonomy. During the crisis in New Orleans, some people didn’t want to leave their homes, other people wanted to be rescued- this affects dignity.

- “Integrity”: This brings to mind professional integrity (ethics). Could the criterion be widened to make it less political? Rather define it as the concept of standing for something, that you follow a certain set of rules, and that you are a predictable entity.
- “Sustainability”: This criterion also stands out, and is a bit controversial. Originally, it was identified and incorporated into the framework as an output of 93.1. It is a research ethical principle in the NSD guidelines. The criterion usually has an economic, ecological and social dimension. It is also possible to talk about the sustainability of the “human race?” For the DRIVER project, this criterion could mean: can the training methodology be used in 10 years from now? ESAB suggests adding a disclaimer stating what we *don’t* mean by that criterion. There is also a suggestion to link it closer to the resilience literature. Sustainability here implies “holding the status quo” in the same context over time. That means, however, if we actually don’t want to keep things as they are, maybe sustainable solutions are not something that we want. There is also a suggestion from the ESAB that the criterion is a value for an organization, but not for a society. PRIO asks whether sustainability is then a value or a methodology? It is suggested to tie it closer to adaptability and resilience literature.
- “Political Reputation” and “State-Citizen-Relationship”: This could be combined in “Legitimacy”. The two would be sub-categories of legitimacy.
- “Open society” and “Transparency”: Are these too similar? PRIO: No, they reflect different issues. “Open society” relates to the opposite of a culture of suspicion; Transparency is about the clear communication of information. PRIO will add sentence in the style of: A is different from B because....

Further, the ESAB suggests bringing back the headlines to the criteria-categories, dividing the set of criteria into political and core societal values etc. The ESAB also suggests evaluating if we should distinguish the criteria in terms of values and other principles that we can assess against.

It was agreed that PRIO will share one example of a full assessment, once it is ready in its most recent format (as going into D92.22 or D93.21). Such an example would include:

1. A set of criteria
2. The definitions of the criteria (including an example)
3. A systematization of the DRIVER functions
4. A short intro explaining each subcategory (function)

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5. The actual assessments, which is a section linking the relevant criteria to the subcategory (function)
6. A DRIVER specific example
7. A list of concrete bullet-point style recommendations.

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## 3 Conclusion & Action list

The meeting was concluded with a discussion of the Action Points. PRIO and the ESAB agreed upon the following Action Points:

| N° | Who                          | Action  | To whom                                     | When   | Status |
|----|------------------------------|---|---|--|--------|
| 1. | PRIO,<br>Mareile<br>Kaufmann | Distribution of the Minutes v 0.1   | ESAB  | 24<br>September<br>2015  | Done   |
| 2. | ESAB                         | Comments/Feedback: Are there any special requirements for storing sensitive data?   | Stine<br>Bergersen &<br>Mareile<br>Kaufmann | 5 October<br>2015  | Done   |
| 3. | ESAB                         | Comments/Feedback: Do research results exist about participant's responses to informed consent forms? (E.g. does the informed consent procedure influence the decision whether to participate in research?) | Stine<br>Bergersen &<br>Mareile<br>Kaufmann | 5 October<br>2015  | Done   |
| 4. | ESAB                         | Comments/Feedback: If data collection, e.g. per drone, happens across different countries and data is stored in yet another country, who applies for approval?  | Stine<br>Bergersen &<br>Mareile<br>Kaufmann | 5 October<br>2015  | Done   |
| 5. | PRIO/ESA<br>B                | PRIO distributes the already re-worked list of criteria to be commented upon by the ESAB  | Stine<br>Bergersen,<br>ESAB                 | Criteria sent :<br>28<br>September,<br>comments :<br>5 October<br>2015 | Done   |
| 6. | PRIO                         | Incorporation of ESAB's written feedback into the Minutes   | Mareile<br>Kaufmann                         | 6 October  | Done   |

Table 4 Action List

|                       |  |                       |    |                 |              |                |       |
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**Responses by the ESAB to the Action list by October 5<sup>th</sup>:**

The ESAB endorses the Minutes.

As for the societal impact assessment criteria Ingierd endorsed the latest document, Hadjimatheou commented and Petousi agrees with Hadjimatheou’s comments. She adds, however, the importance to explain that different criteria relate to each other and overlap. Such a comment could either be integrated into each criterion’s definitions or could be stated once in the introduction to the assessment framework. A consolidated list of criteria with Feedback from the ESAB will be made available *in the next deliverable containing the Societal Impact Assessment Framework*.

Ingierd, Hadjimatheou and Petousi agree on the following Action Points:

- **Action 2:** Are there any special requirements for storing sensitive data?
- Ingierd states that the general requirements that apply to personal data apply to sensitive data as well. But security measures, such as access policy, need to be proportional to the risks involved and the sensitivity of the data. Thus, one has to make sure that the security measures are acceptable, with a view to the consequences of any breach for the individual.
  
- **Action 3:** If data collection, e.g. per drone, happens across different countries and data is stored in yet another country, who applies for approval?
- Ingierd feeds back that the EU’s Data Protection Directive states that the “data controller” collects the data in each country and that data controller must notify/apply to their supervisory authorities when they process personal data. However, this is about to change. The European Commission has proposed a comprehensive reform of the EU’s 1995 data protection, partly due to the recognition that technological progress and globalization have changed the way data is collected, accessed and used. A key change (under proposal) is making legitimate transfers easier and less burdensome by reinforcing and simplifying rules on international transfers. In short, this will better reflect the multiplicity of actors involved in data processing activities and in practice it means that one leading actor can notify the authorities in all countries. In sum, we still need to look to the EU’s Data protection Directive, meaning that a national representative has to apply in each country before personal data can be transferred.
  
- **Action 4:** Do research results exist about participant’s responses to informed consent forms? (E.g. does the informed consent procedure influence the decision whether to participate in research?)
- Ingierd identified an article that talks about the influence of information on risk and monetary payment on research participation and to what extent research participants actually understand the information given in informed consent forms. (see for example <http://jme.bmj.com/content/30/3/293.short>)

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- Petousi mentions that she identified relevant articles from which it becomes clear that the content of information received and the language used does indeed have an impact on people's willingness to participate in research experiments. She shared some reference which will be integrated into the revision on 91.3.

The next meeting of the ESAB is scheduled to take place before M29 (September 2016), and it is very likely that the DRIVER Experiments, and the utilization of the SIA Framework in those, as well as potential topics raised by the partners (e.g. through the next version of the Ethical Monitoring Report- D130.42, due in M24) will be topics for this meeting.

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## References

[1] Kaufmann, M. & Bergersen, S. (ed.) : D95.11 Minutes of the Ethical and Societal Advisory Board. Deliverable of the DRIVER project, 2014.

[2] Bergersen, S. (ed.) : D95.31 Ethical Monitoring Report. Deliverable of the DRIVER project, 2015.

[3] Kaufmann, M. & Bergersen, S. (ed.) (forthcoming 2015) : D840.11 Societal Impact Assessment Framework. Deliverable of the DRIVER project, 2015.

[4] Kaufmann, M. & Bergersen, S. (ed.) (forthcoming 2015) : D840.21 A guide to unintended Societal Impact. Deliverable of the DRIVER project, 2015.

[5] RT (2015). *Skype communication app is down across the globe*, <https://www.rt.com/news/316056-skype-messaging-down-globe/>, retrieved October 30 2015.

[6] Gilbert, D. (2015) International Business Times. *Skype App down for users around the world*. <http://www.ibtimes.com/skype-app-down-users-around-world-2105814>, retrieved October 30 2015

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## Annexes

1. List of preliminary societal impact assessment criteria before ESAB's inputs<sup>1</sup>
2. PowerPoint presentation made by PRIO

### Unease - Calmness

Crisis management activities may create unease, but may also make the population calm, if they are planned and deployed in a specific way. Calmness refers to the state of feeling calm, or in a composed state, especially under difficult or disturbing conditions, such as a crisis. A certain level of unease can be valuable in a crisis situation, in order to make people alert and responsive, but in general, a crisis management function that creates calmness in the population is argued to be the most constructive way of doing crisis management. In addition, a calm society can also be said to be better suited to react to a crisis, since reflected and informed decisions may be easier to take under calm conditions. To create calmness, research indicates that it is important that the distributed information is real, and that it doesn't feed rumors and misconceptions during the crisis.<sup>2</sup>

*Example: The preparation of the information to be given to the public during a crisis, can easily be done in a way that creates more unease than calmness (or constructive alertness), but the information can also be helpful and make the population feel more at ease, if it strikes the right balance between truthfulness and necessity.*

### Suspicion - Trust

Suspicion refers to the feeling of suspecting something or being suspected of something<sup>3</sup>. The term often has a negative connotation, but can also be a constructive feeling when it refers to being alert. Trust is a key element of relationships between and within social groups and individuals, and the general trust in the population can influence the trust in new CM measures. Trust is tied to the belief that someone or something is reliable, good, and honest. It also refers to the reliance on the integrity, strength, and ability of a person or a state, an institution, a system, or an organisation.<sup>4</sup> The emergence of new crisis management technologies, especially information technology, has a great impact on how societies define and experience trust. (Cf. State-citizen

<sup>1</sup> The following annex is a list of criteria definitions. These reflect exactly what was handed out and later sent to the ESAB for them to comment upon. It presents a draft of the criteria definitions, as they looked like at the time of the ESAB meeting. Therefore, the formatting of references does not follow the new template for DRIVER deliverables. However, the full list of the *revised* criteria including the updated formatting of references etc. can be found in the forthcoming D84.11, which describes in detail the Societal Impact Framework, and where the final version of this list is presented.

<sup>2</sup> Vieweg, S., Hughes, A. L., Starbird, K., & Palen, L. (2010). Microblogging during two natural hazards events: What twitter may contribute to situational awareness. Paper presented at the Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Atlanta, Georgia, USA.

<sup>3</sup> Suspicion (2014). In *Dictionary*. Available at: <http://dictionary.reference.com/browse/suspicion?s=t>

<sup>4</sup> Oxford Dictionary: Trust <http://dictionary.reference.com/browse/trust>

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relationship; political reputation). The information shared during a crisis is more trustworthy if it is derived from reliable sources. Studies show that e.g. during the earthquake in Tohoku and the tsunami in Japan in 2011, the unreliable nature of “ReTweets” was problematic- e.g. because the ReTweets contained information about people that were no longer in danger<sup>5</sup>.

*Example: In the CM context, on a macro level, trust in infrastructure and other organizational/ administrative systems is important, but also, on a micro level, having a trustful relationship between crisis managers and the public can make it easier for crisis managers to plan CM efforts, as they know that the public will relate to instructions and advice given in the different phases of the CM cycle. Trust can also be enforced by communicating transparently, e.g. what data collection during crises is used for, and by limiting the access to it.*

### **Misuse - Protection**

An important part of crisis management is to ensure the protection of the population (or the relevant referent object). This means to preserve or protect the population or infrastructure etc. from harm. Protection can also mean protecting central societal values, which are important to uphold in a community. This can both be especially important and especially challenging in a crisis situation that takes a toll on the crisis management operations, where the easiest solutions may not always be the most societally friendly. Protection of society through CM solutions can enforce trust in the population, and has the opportunity to foster societal values such as diversity and equality.

*Example: Although the technology can also be misused for other purposes, using an UAV (drone) during a crisis to map where the people in need are located, can protect the population from (additional) harm, and allow them to evacuate in a more effective way. This can in the longer term foster trust and ease in the population (as they are aware of the existence of technology that can save them during a crisis) and thus have a positive societal impact.*

### **New Vulnerabilities - Progress**

A new crisis management function or tool is a function or tool that is either newly introduced or re-introduced in a different manner. This can mean that the CM field is developing or progressing, making more functions available for crisis management. Innovation and development brings forth new solutions that may be more efficient, effective and suitable for the task. This can reduce bureaucratic complexity or financial costs, and thus foster a sense of calmness and confidence in the population, as there is a general sense that the effort to minimize the burden of a potential crisis is progressing.

*Example: Although the introduction of a new CM tool (such as an early warning system) relying on new technology can create new vulnerabilities that were not there before, a progressive CM industry that develops and makes progress in finding more effective and suitable CM solutions can create positive societal impact by being able to issue more precise warnings.*

### **Applicability - Value Added**

<sup>5</sup> [http://www.eurekaalert.org/pub\\_releases/2011-04/ip-tan041511.php](http://www.eurekaalert.org/pub_releases/2011-04/ip-tan041511.php)

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A crisis management function or tool that is relevant, useful or appropriate for the defined cause or a particular task is applicable, but a crisis management tool that is not only useful and timely, but actually brings with it new opportunities for doing something good for the individual/ population/ society can be said to have a value added. Value added means that it not only fulfils its planned function, but that it creates something more, and thus fosters positive impact on the society. This can e.g. be the case if a solution intended to coordinate networks for crisis management response actually creates a social network of people which in turn fosters social cohesion and benefits other areas of society as well.

*Example: When developing training programs for societal resilience, it is important to understand in which context this training will take place. If this training is for volunteers in a local community, it has the potential to create social cohesion, and in a way establish a social group that might be beneficial in the personal lives of the individuals involved. If this happens, the CM function “training communities” can be said to have and added value.*

### **Technology Dependency - Flexible Solutions**

When a society becomes dependent on a certain technology, making it vulnerable in case that technology falls out or becomes temporarily unavailable, we talk about technology dependency. This is as opposed to versatile and flexible crisis management solutions that are adaptable for many different uses or functions, and that are even meant to be applicable in several areas. This includes realizing that over-reliance on a certain CM tool can create dependency and vulnerability. Flexibility is important when responding to the needs of a country struck by crisis. Flexible crisis management solutions are solutions that are not limited to one particular use or activity. Harmonized and flexible solutions that can be adapted to many contexts without harming (specific groups of) the affected population are most effective.

*Example: Ensuring a flexible crisis management capability in an organization can make it easier to maintain effective lines of communication, e.g. because several solutions to communicating exists at the same time. This can foster a crisis management operation that is able to better communicate relevant and true information to the public, and thus foster positive impact.*

### **Function Creep - Specialized and Controlled Use**

When developing, implementing and refining technological solutions for crisis management, the risk of function creep can be defined as the gradual widening of the use of a technology or system beyond the purpose for which it was originally intended, especially when this leads to the potential invasion of privacy<sup>6</sup>. A specialized crisis management solution however, is a solution that is adapted to special conditions or restricted to special functions. This can imply that the technology is particularly tailored to the cause, and has imposed restrictions. Specialized solutions, tailored to a specific problem can not only be more applicable and useful, but is can also minimize the risk of function creep, i.e. negatively impacting privacy. Standardization of CM solutions can create opportunities for CM to establish and build on best practise solutions that in the long term can influence the society positively.

<sup>6</sup> Function creep (2014). In *Dictionary*. Available at: <http://dictionary.reference.com/browse/function%20creep?s=t>

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*Example: By building in best practise requirements in the CM solutions, the crisis managers have the opportunity to establish a best practise standard for example by basing the solution on the highest level of privacy or by setting requirements for a higher level of transparency, which could, in turn impact society positively by enforcing trust in the population or the users of the CM solution.*

### **Sustainability**

Although sustainability can refer to a number of things, in the context of CM, it refers to the principle of ensuring that a measure or tool lasts for a significant amount of time and in various contexts. DRR is described as a good practice and essential to strengthening resilience as it enables communities to anticipate, absorb and bounce back from shocks and it is important for sustainable development. The sustainability of social systems can be strengthened e.g. by increasing public participation and the access to public goods. After a crisis, communities shall at least bounce- back to equilibrium- but preferably build back better. After a crisis, this means to use the opportunity to create solutions that not only replace the old solution, but that creates a better solution that e.g. takes environmental aspects into account in a better way. In general, current practices and methods should be challenged and constantly improved in order to see if new approaches are more suitable and sustainable.

*Example: Investing in resilience and focusing on risk reduction can increase the sustainability in other areas as well. Resilience measures could thus have a positive spill-over effect into other societal domains, such as strengthening social cohesion by enforcing shared values among the (crisis) population.*

### **Accountability**

Accountability is the obligation of an individual or organization to account for its activities, accept responsibility for them, and to disclose the results in a transparent manner.<sup>7</sup> As a core value of good governance, public accountability ensures that actions and decisions taken by public officials are subject to oversight in order to guarantee that these initiatives meet their stated objectives and respond to the needs of the community they are meant to be benefiting.<sup>8</sup> Responsible and open communication is a central part of accountability for CM (Cf. Transparency, Openness & Visibility).

*Example: Typically during CM situations many different organizations and actors implement a variety of measures. If the accountabilities for conducting these measures or using CM tools is not clearly set out, potential negative side-effects and damages cannot be regulated effectively in the aftermath. It is thus crucial to determine accountabilities beforehand as a part of planning measures and tools, in order to reach the most positive societal effects.*

### **Transparency**

Transparency means information disclosure, clarity and accuracy to enhance "the perceived quality of intentionally shared information from a sender".<sup>9</sup> Transparency is then also to communicate about and make those kinds of actions visible that cannot be perceived by crisis populations directly, but may have consequences for their rights, actions and reactions. An open society (cf. Open Society) is

<sup>7</sup> <http://www.businessdictionary.com/definition/accountability.html>

<sup>8</sup> World Bank,

<http://siteresources.worldbank.org/PUBLICSECTORANDGOVERNANCE/Resources/AccountabilityGovernance.pdf>

<sup>9</sup> Schnackenberg and Tomlinson, 2014

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often characterized by a high level of transparency, meaning e.g. public discussions and debates are conducted in a way that allows for the public to follow them.

*Example: If an emergency measure foresees the implementation of technologies that may collect personal data, transparent communication explains publicly and in an accessible manner what kind of data that would include, what it does not include, which purpose it serves and how it is going to be processed, published and destroyed. If these aspects are clearly and transparently communicated before and during emergencies, the societal acceptance of such measures may be higher (cf. Trust; D92.11 Legitimacy).*

## Integrity

Within the DRIVER project, integrity refers to two aspects that are particularly relevant for the political dimension of crisis management. A) Integrity means to adhere to ethical principles<sup>10</sup> when planning and implementing crisis management measures and tools. B) Integrity also means “standing for something”<sup>11</sup> and showing this through truthful, accurate and consistent actions, values and principles.<sup>12</sup> Here, integrity is the opposite of hypocrisy.<sup>13</sup>

*Example: A crisis management measure/organization has a high level of integrity when it respects widely accepted ethical codes and rights, such as the European Charter for Fundamental Rights. Integrity is also an important aspect of network security and resilience, which means that the operators’ obligation to meet risks in an appropriate way and to report security breaches has to be strong.<sup>14</sup>*

## State-Citizen-Relationship

The state derives its legitimacy from its interaction with citizens.<sup>15</sup> States are legitimate when elites and the public accept the rules regulating the exercise of power as proper and binding.<sup>16</sup> The state-citizen relationship is thus a relationship marked by the legitimate exercise of power. In the crisis management context, attention needs to be paid as to how measures and tools may change this legitimate power-relationship.

*Example: Expecting citizens to take on self-managerial roles during crises that are more demanding than they can manage, challenges the legitimacy of the power-relationship between the state and the citizens. Citizens may easily feel overburdened and feel exploited or left alone rather than helped. This happened, for example, after Hurricane Katrina, when resilience programs overburdened locals. It is important to plan such programs in a realistic and participatory manner.<sup>17</sup>*

## Political Reputation

<sup>10</sup> Merriam Webster Dictionary: Integrity

<sup>11</sup> Stanford Encyclopedia of Philosophy: Integrity

<sup>12</sup> MacCallum, 1993; Pillai, 2011

<sup>13</sup> Lucaites, 1999

<sup>14</sup> European Commission (2009): "Protecting Europe from large scale cyber-attacks and disruptions: enhancing preparedness, security and resilience". Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0149:FIN:EN:PDF>

<sup>15</sup> GSDRC

<sup>16</sup> Papagianni, 2008

<sup>17</sup> <http://www.rhizomia.net/2014/02/comment-on-tom-slaters-blog-post.html>

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Political reputation refers to the social opinion<sup>18</sup> and evaluation of a political entity. The reputation of a political entity is influenced by public discourses.<sup>19</sup> Bad political reputation often is accompanied with a low acceptance of policy measures. Resilience should be country-led and country-owned. National strategies will require firm political commitments and accountability, and may involve institutional change and technical support, including in-country coordination mechanisms. A lack of dedication towards this kind of progress could influence the political reputation for the state at stake.<sup>20</sup> If the crisis population does not trust the administrative- or governmental actors that are implementing the crisis effort, the implementation of the efforts is less likely to be successful. The general trust in the population will influence the trust in new measures that are suggested (cf. Trust).

*Example: A crisis management measure or tool that includes potentially controversial methods, such as excessive public warning or insufficient planned infrastructure protection, can influence the reputation of the political entity that implements it. At the same time the reputation of a political entity can influence the measure to be implemented. In crisis situations, it is important to follow principles of transparency and integrity in order to foster political and societal acceptability of measures (cf. Integrity; Transparency, Openness and Visibility; D92.11 Legitimacy).*

### Negative - Positive Standardization

Standardization generally describes the process of developing a specific level of quality or attainment<sup>21</sup> for materials, products and services in order to ensure that they are “safe, reliable and of good quality”.<sup>22</sup> Negative standardization refers to the overarching social process of establishing a procedure as normal when in fact it has detrimental effects. Positive standardization then refers to the process of implementing standards that have positive societal effects.

*Example: Crisis management tools that are ethically accepted, suitable, necessary and proportional can be considered for standardization, as they might have positive societal impact. This could e.g. be to promote the standardization of international terminology to ease international cooperation in CM.*<sup>23</sup>

### International Cooperation

International cooperation describes the act of working together for a common purpose<sup>24</sup> and to find responses for international challenges.<sup>25</sup> It is often organized and officially regulated in international treaties. Since emergencies can easily become a matter of international concern, as exercised in the DRIVER experimentation campaigns, crisis management necessitates international cooperation, but it can also potentially cause (unwanted) spill-over effects in other domains of international cooperation

<sup>18</sup> Oxford Dictionary: Reputation

<sup>19</sup> Benoit, 1995

<sup>20</sup> European Commission (2013): “Action Plan for Resilience in Crisis Prone Countries 2013-2020”. Available at: [http://ec.europa.eu/echo/files/policies/resilience/com\\_2013\\_227\\_ap\\_crisis\\_prone\\_countries\\_en.pdf](http://ec.europa.eu/echo/files/policies/resilience/com_2013_227_ap_crisis_prone_countries_en.pdf)

<sup>21</sup> Oxford Dictionary: Standard

<sup>22</sup> International Organization for Standardization: [http://www.iso.org/iso/about/discover-iso\\_meet-iso/about.htm](http://www.iso.org/iso/about/discover-iso_meet-iso/about.htm)

<sup>23</sup> UNISDR (2014): “A catalyst for change: How the Hyogo Framework for Action has promoted disaster risk reduction in South East Europe”. Available at: <http://www.unisdr.org/we/inform/publications/39269>

<sup>24</sup> Dictionary.com: Cooperation

<sup>25</sup> Center on international Cooperation: About

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when not properly managed. However, the strengthening of international cooperation is important, especially in relation to legal and structural developments for improving the security and safety of international supply chains and movement of goods across EU borders.<sup>26</sup>

*Example: Working together in global and local partnerships is central to strengthen resilience. Promoting resilience in international forums such as the G8 will also underscore its importance. E.g. for countries facing recurrent crises, working with regional and international organizations to create platforms at country level for facilitating the exchange of information can be important to strengthen resilience.*<sup>27</sup>

### Legality

A central rule that forms a baseline for all activity within DRIVER is the principle of legality. This refers to an attachment to, or an observance of law, and the quality or state of being in accordance with the law<sup>28</sup>. This includes that the development of crisis management solutions and tools can only happen according to the relevant legal regulations in the given conditions and the context. Legitimacy refers to the acceptance of law and measures and various levels of legitimacy influences whether the law serves the intended purpose or not. Furthermore, agreement upon and adherence to legal principles can stimulate positive societal impact by fostering predictable and accountable CM actors, that act on behalf of the same set of rules.

*Example: As research has shown, an increasing amount of UAVs are currently being used for CM even though the regulative basis for the deployment of UAVs has not been fully developed yet and varies in different countries and legislations. Infringements upon this regulation have become known, for example when the Federal Emergency Management Agency in the US grounded drones deployed by the company Falcon for damage assessments after the Colorado Floods<sup>29</sup>. Even though the society and Falcon could have considered this use as legitimate - given the crisis situation - the use was not legal. The so-called Working Party 29 in the European Commission recommends manufacturers and operators of UAV's to embed privacy friendly design choices and privacy friendly defaults as part of a privacy by design approach. The aim is to help industry stakeholders and operators to prevent infringements and to enhance the social acceptability of drones<sup>30</sup>.*

### Suitability, Necessity & Proportionality:

The so-called «proportionality test» is an instrument in EU law<sup>31</sup> to determine fairness and justice. It examines the suitability of a measure/tool in terms of its suitability, asking whether the appropriate means are being used to pursue the given objective. In a second step the test examines the necessity of a measure/tool, asking whether there is an alternative measure that is less restrictive than the

<sup>26</sup> European Commission (2010): "The EU Internal Security Strategy in Action: Five steps towards a more secure Europe". Available at: [http://ec.europa.eu/commission\\_2010-2014/malmstrom/pdf/news/internal\\_security\\_strategy\\_in\\_action\\_en.pdf](http://ec.europa.eu/commission_2010-2014/malmstrom/pdf/news/internal_security_strategy_in_action_en.pdf)

<sup>27</sup> European Commission (2013): "Disaster Risk Reduction. Increasing Resilience by Reducing Disaster Risk in Humanitarian Action". Available at: [http://ec.europa.eu/echo/files/policies/prevention\\_preparedness/DRR\\_thematic\\_policy\\_doc.pdf](http://ec.europa.eu/echo/files/policies/prevention_preparedness/DRR_thematic_policy_doc.pdf)

<sup>28</sup> Legality (2014). In *Oxford Dictionaries*. Available at: <http://www.oxforddictionaries.com/definition/english/legality>

<sup>29</sup> <http://www.falconunmanned.com/falcon-uav-news/2013/9/14/-falcon-uav-supports-colorado-flooding-until-grounded-by-fem.html>

<sup>30</sup> [http://ec.europa.eu/justice/data-protection/article-29/documentation/opinion-recommendation/files/2015/wp231\\_en.pdf](http://ec.europa.eu/justice/data-protection/article-29/documentation/opinion-recommendation/files/2015/wp231_en.pdf)

<sup>31</sup> Craig and de Búrca, 2011

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measure in question and that is equally effective in achieving the pursued objective.<sup>32</sup> Finally, the «proportionality test» examines the proportionality in strict sense, namely whether the effects of the measure “are disproportionate or excessive in relation to the interests affected. At this stage the true weighing and balancing takes place.”<sup>33</sup>

*Example: Airborne sensors in unmanned aerial vehicles can be a suitable means to get an overview of an emergency situation. Alternative measures, for example manned helicopters (for non-automated data collection), do exist to fulfil this task as well. Helicopters may, however, be more expensive, so there is potentially a financial necessity to use airborne sensors; or sensors might have an added value as compared to human surveillance. The key question is then whether an airborne sensor, by collecting vast amounts of data that is not relevant for the situational analysis, is proportional to the objective in the narrow sense. This has to be balanced vis-à-vis the benefits of the airborne sensor. If CM measures are not proportional, they will cause several secondary effects, for example a low level of acceptability of negative standardization (cf. negative standardization; trust; D92.11: Legitimacy), which could contradict the effect/ aim of CM.*

### **In/justice & In/equality**

Just and equal crisis management means that the CM activity is done according to certain principles (e.g. human rights) and that it is equitable, fair, non-partial and proper. It can also mean that it is rightful and lawful, and facilitated the treatment of all individuals in the same way. While it is a standard to provide support for the most affected and the most vulnerable first, the fair, just and equal distribution of help and resources during crises needs to be assured. Equal treatment cannot always be a given, since time and resources are often limited and sometimes seemingly unfair decisions have to be taken and priorities set. The idea is to avoid unfair, unequal or disproportionate treatment of two social groups or between two individuals wherever possible. (cf. non-discrimination or gender- and culture-sensitivity).

*Example: As women are generally underrepresented when it comes to political participation in crisis management<sup>34</sup>, ensuring the inclusion of women in all levels of the crisis management organization, locally, regionally and internationally, could help foster political participation and influence by women in decision-making about crisis management, and thus foster equality.*

### **Social Cohesion & Solidarity**

The Council of Europe defines social cohesion as the capacity of a society to ensure the well-being of all its members, minimising disparities and avoiding marginalisation. Cohesive societies have the capacity to manage differences and divisions and ensure the means of achieving welfare for all members.<sup>35</sup> Social cohesion thus refers to the reduction of disparities, inequalities and social exclusion within or between societal groups, as well as the strengthening of social relations,

<sup>32</sup> Dzabirova, 2009

<sup>33</sup> Ibid. : p. 1.

<sup>34</sup> See e.g. [http://www.weforum.org/pdf/Global\\_Competitiveness\\_Reports/Reports/gender\\_gap.pdf](http://www.weforum.org/pdf/Global_Competitiveness_Reports/Reports/gender_gap.pdf)

<sup>35</sup> Council of Europe, 2008

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interactions and trust.<sup>36</sup> Solidarity refers to the feeling or action that produces a community of interests, objectives and standards. It is a common way to show mutual support within a group.<sup>37</sup> The fundamental principle of solidarity of the EU is based on sharing both the advantages, i.e. prosperity, and the burdens equally and justly among all group members. The Internal Security Strategy in Action requires solidarity in response and responsibility in prevention and preparedness of crisis within the EU. Also, the solidarity clause in the Treaty on the Functioning of the EU introduces a legal obligation on the EU and its member States to assist each other when an EU State is the object of a terrorist attack or a natural or man-made disaster.<sup>38</sup>

*Example: Crisis management measures have the potential to positively affect social cohesion if they are applied equally and not in a discriminatory or unequal manner against a specific social group. Creating a societally cohesive community of volunteers and responders can positively influence the resilience and flexibility of the CM organization. An equal and non-discriminatory distribution of emergency help, taking the needs of different societal groups into account, can also foster trust.*

## Participation

Participation is the action of taking part in something, but also the state of being related to a community, region, or nation.<sup>39</sup> As a core societal value, participation is understood as public participation -the belief that those who are affected by a decision have a right to and an interest in being involved in the decision making-process. Participation also entails that all participants involved in decision-making processes need to be provided with the information they need to contribute in a meaningful way.<sup>40</sup>

*Example: Public participation during the development of a crisis management tool or measure will increase its effectiveness and acceptance among the affected population once it is implemented. On the contrary, preventing the participation of potentially affected populations could lead to an eventual distrust, suspicion and even misuse of the CM measure or tool during its implementation, e.g. because the tool does not reflect the actual needs. One way to ensure participation is to ask populations in need for evacuation during a crisis about where they prefer to be sheltered and reallocated.*

## Diversity

Diversity refers to the condition of having or being composed of differing elements, especially, the inclusion of different types of people in a group, organization or country.<sup>41</sup> Specific actions must be taken to consider and ensure that their views are incorporated into any analysis activities taking

<sup>36</sup> UNDP and NOREF, 2014

<sup>37</sup> See Oxford Dictionary, the Free Dictionary and Merriam-Webster Dictionary

<sup>38</sup> **Official Journal of the European Union, C 306, 17 December 2007** <http://www.-treaty.org/wcm/the-lisbon-treaty/treaty-on-the-functioning-of-the-european-union-and-comments/part-5-external-action-by-the-union/title-7-solidarity-clause/510-article-222.html>, [http://europa.eu/lisbon\\_treaty/full\\_text/index\\_en.htm](http://europa.eu/lisbon_treaty/full_text/index_en.htm)

<sup>39</sup> Oxford Dictionary: Participation

<sup>40</sup> International Association for Public Participation. Core Values, <http://www.iap2.org/?page=A4>

<sup>41</sup> Merriam-Webster Dictionary: Diversity

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place in the community. As a core societal and democratic value, diversity describes the wide range of racial, cultural, ethnic, linguistic, and religious variation that exists within and across societies. Cultural, religious and linguistic diversity is recognized and protected by the European Charter of Fundamental Rights (art. 22).<sup>42</sup> (Cf. Dignity & Non-discrimination; Cultural & Gender Sensitivity).

*Example: Crisis management tools and measures have to take the diversity of the crisis population into consideration to avoid cultural, linguistic, religious and gender discrimination of the general population, but also e.g. female end-users applying a given tool. Crisis management tools furthermore have to be publicized in all languages spoken by the crisis population. Another example is if health programs during crises do not plan for the specific needs of elderly or children they will not succeed in building resilience. (cf. Societal Cohesion)*

### Open - Control Society

An open society is characterized by a flexible structure, freedom of belief, a wide dissemination of information<sup>43</sup> and a respect for core societal values, which creates a feeling of trust and security in society. In an open society, the authorities are expected to be tolerant and flexible and respond to demands in the society. Societies of control, however, use mainly control technologies to establish security, which may also apply to crisis management tools. Societies of control thus create a feeling of security that is also based on distrust. (Cf. Trust)

*Example: The use of technologies to single out potential troublemakers during a large event may contribute to the preparedness of crisis management, but they also are based on the idea of establishing security through control. Ensuring that this kind of control is perceived as proportional is important to ensure the acceptability of the use of such technologies, which can streamline and improve crisis management.*

### Cultural & Gender Sensitivity

This criterion refers to socio-cultural and gender-based particularities that need to be respected in the development of CM tools and measures. CM decisions, tools and measures can have different effects on men and women, boys and girls and groups of different cultural backgrounds. It is important to mainstream gender and cultural sensitivity across all phases of a crisis situation and specifically when developing new tools and measures. As women and marginalized groups can potentially suffer disproportionately during and after crises, resilience enhancements could be mainstreamed with other interrelated sector goals, such a gender. Enhancement can only be reached by empowering vulnerable individuals.<sup>44 45</sup>

*Example: Men and women experience stress and traumatic events in very different ways due to biological and socio-cultural factors. Psychosocial support measures therefore should be adjusted to the different gender, age and cultural circumstances of the crisis populations to ensure an effective and inclusive delivery of emergency aid and support. This means for*

<sup>42</sup> Banks et. al., 2005 <http://depts.washington.edu/centerme/DemDiv.pdf>

<sup>43</sup> Oxford Dictionaries: Open Society

<sup>44</sup> British Red Cross & IFRC (2013): "Options for including community resilience in the post-2015 development goals". Available at: <http://www.redcross.org.uk/What-we-do/~media/BritishRedCross/Documents/What%20we%20do/Preparing%20for%20emergencies/Community%20resilience.pdf>

<sup>45</sup> European Commission (2013): "Disaster Risk Reduction. Increasing Resilience by Reducing Disaster Risk in Humanitarian Action". Available at: [http://ec.europa.eu/echo/files/policies/prevention\\_preparedness/DRR\\_thematic\\_policy\\_doc.pdf](http://ec.europa.eu/echo/files/policies/prevention_preparedness/DRR_thematic_policy_doc.pdf)

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*example that women’s role as breastfeeding mothers needs to be taken particular care of in a crisis.<sup>46</sup> In addition to that, it is important to pay attention to gender diversity in CM to allow for the availability of female crisis managers to female aid recipients. If this is not guaranteed, a whole societal group is unaddressed by the scope of emergency management.*

### Dignity & Non-Discrimination

Dignity is considered to be a universal value of the European Union. It means that a human being has an innate value and the right to be treated ethically. This right is inviolable and must be protected in accordance with Article 1 of the European Charter of Fundamental Rights.<sup>47</sup> Dignity is closely related to Article 21, the right to non-discrimination, which forbids any discrimination “based on any ground such as sex, race, color, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation”.<sup>48</sup> (Cf. Diversity; Cultural & Gender Sensitivity)

*Example: When trying to strengthen resilience, both social and cultural local values shall be maintained (if not conflicting with fundamental principles or human rights) and human dignity respected. Non-discrimination is practiced if response measures that organize and provide access to first aid, e.g. do not neglect homeless people in favour of others. Non-discrimination means that CM should make « no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress»<sup>49</sup>*

### Privacy & Data Protection

The content of privacy is contested. It mainly refers to the right to seclusion and to create an intimate sphere. Article 7 of the European Charter for Fundamental Rights<sup>50</sup> protects the right to privacy as the right for private and family life. But privacy is no longer “the right to be let alone” only.<sup>51</sup> It has become a concept, a regime, a set of policy instruments and a way to frame civil society activism.<sup>52</sup> A working definition is “the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others”.<sup>53</sup> As such, it is closely related to the protection of personal data (Article 8). Protection also means that data has to be processed fairly, with the consent of the concerned person, who also has the right to access this data. This was framed as the right to “informational self-determination”.<sup>54</sup> Both, privacy

<sup>46</sup> European Commission (2014): “AGIR – Building Resilience to food and nutrition crisis in the Sahel & West-Africa”. Available at: [http://ec.europa.eu/echo/files/aid/countries/factsheets/sahel\\_agir\\_en.pdf](http://ec.europa.eu/echo/files/aid/countries/factsheets/sahel_agir_en.pdf)

<sup>47</sup> Official Journal of the European Communities, 2000

<sup>48</sup> Ibid.: p. 13.

<sup>49</sup> <http://www.ifrc.org/en/who-we-are/vision-and-mission/the-seven-fundamental-principles/impartiality/>

<sup>50</sup> [http://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](http://www.europarl.europa.eu/charter/pdf/text_en.pdf)

<sup>51</sup> Warren and Brandeis, 1890

<sup>52</sup> Bennett, 2011

<sup>53</sup> Westin 1967: p. 7

<sup>54</sup> BVerfG, Urteil des Ersten Senats vom 15. Dezember 1983, 1 BvR 209/83 u. a. – Volkszählung –, [BVerfGE 65,1](#).

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and data protection no longer relate to individuals only but express a conflict that affects society as a whole.<sup>55</sup>

*Example: The implementation of privacy friendly CM measures means to respect the right of the individual to have a private life. As the right to privacy is a fundamental principle in the EU, CM measures that respects, and even advances best practice solutions on the area, have the opportunity for foster trust in the population and improve the (political) reputation of the CM actors. This opportunity is closely linked also to the notion of transparency and legality.*

### **Freedoms & Protest**

The European Charter for Fundamental Rights addresses a range of freedoms. The most relevant for the crisis management context are the freedom of thought, conscience and religion (Article 10), which means that it is possible to “change religion or belief and freedom, either alone or in community with others and in public or in private, to manifest religion or belief, in worship, teaching, practice and observance”.<sup>56</sup> Another freedom is that of expression and information (Article 11), which states that everyone can hold and express their opinion and has the right “to receive and impart information and ideas without interference by public authority”.<sup>57</sup> A third important article is the freedom of assembly and of association (12),<sup>58</sup> which includes the freedom to form peaceful associations, for example, on political, trade union and civic matters.

*Example: According to the “Hyogo framework for action 2005-2015”, in order to foster positive societal impact, the media should be engaged in stimulating a culture and climate of resilience and community engagement.<sup>59</sup> In general, protecting societal values like freedom can make the population more resilient against shocks.*

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<sup>55</sup> Simitis 1978 : 709

<sup>56</sup> Official Journal of the European Communities, 2000 : p. 10

<sup>57</sup> Ibid. : p.11

<sup>58</sup> Ibid.: pp. 10-11

<sup>59</sup> UNISDR (2014): “A catalyst for change: How the Hyogo Framework for Action has promoted disaster risk reduction in South East Europe”. Available at: <http://www.unisdr.org/we/inform/publications/39269>

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

ETHICAL AND SOCIETAL ADVISORY  
BOARD MEETING – 21. SEPTEMBER 2015

PRIO

13:00-17:00h



***Driving*** Innovation in Crisis Management for ***European Resilience***

## DRIVER AND SP9 ACTIVITIES: AN UPDATE

Mareile Kaufmann

DRIVER's goal is to enhance disaster-management and coordination as well as societal resilience in Europe. It provides guidance and support for crisis management innovation. It helps practitioners to articulate their needs in a structured dialogue and translate existing capacities into innovation. In doing so, it also fosters flexibility and adaptability to future threats and changing disaster situations.

How is that achieved? DRIVER comes up with evaluated solutions in three key areas, civil society resilience, responder coordination as well as training and learning, providing for a roadmap to innovation for crisis management. These solutions are evaluated in a test-bed, which is also a main asset and permanent output of the project. Besides technical performance criteria for evaluation, DRIVER also provides for regulative frameworks and procedures as well as societal impact assessment. Through stakeholder involvement and the connection of existing networks, the sustainability of the project's results are ensured.

## Project Structure



- Develop frameworks for societal impact assessment
  - For societal impact assessments: A *set of key criteria*, such as social cohesion, integrity, political reputation and equality is applied to a *set of CM functions*, e.g. gap analysis, CM communication practices, simulations and data processing
  - ...including environmental impact assessments: A set of legislation, rules and principles is provided
- Give recommendations and guidelines that can be consulted in the planning of CM solutions to avoid negative and foster positive impacts
- Contribute to awareness-raising on societal and environmental issues both *within DRIVER* and *beyond*
- Contribute to a higher societal acceptability and sustainability of CM solutions in general



Research conducted under the aegis of European Commission projects, i.e. DRIVER research, has to follow research ethics principles.

In order to foster a best practice for research ethics in the project, SP9 provides:

- Templates, guidelines and principles in a usable fashion
- Individual guidance in particular cases
- Monitoring & collection of approvals from data protection authorities
- Establishment of an Ethical and Societal Advisory Board, which discusses key issues
- Writing of annual Ethical Monitoring Reports in collaboration with over 25 project partners

- WP91 Coordination and Conceptualisation of Independent monitoring
  - Coordination
  - State-of-the-Art & Overall Vision Documents
  - Ethical Procedures
- WP92 Mitigation of negative impacts to society
  - Secondary Insecurities
  - Societal Costs
  - Environmental Costs
- WP93 Implementing societal values into CM
  - Opportunities for positive societal impacts
- WP94 Training and education
  - Training and Education Modules on societal impact
- WP95 Ethical and Societal Advisory Board
  - Ethical and Societal Advisory Board
  - Special Clause 15 Compliance Documents
  - Ethics Monitoring

- Before our last meeting
  - 91.3 Ethical procedures, risks and safeguards
  - 92.12, 92.21 Report on the creation of societal insecurities and secondary costs (negative impacts)
  - 93.1 Report on the opportunities for positive societal impact
  - 95.21 Planning for the Ethical Approvals
  - 95.22 Ethical approval 1
- After our last meeting
  - 95.12 Minutes of the ESAB
  - 91.21 Vision Document/Roadmapping Report
  - 94.1 Teaching Methodology
  - 95.31 Ethical Monitoring Report



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## RESULTS OF THE YEAR 1 REVIEW & CHANGES IN THE SP9 CONSORTIUM

J. Peter Burgess



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## ACTIVITIES ON RESEARCH ETHICS

Stine Bergersen

- Delivery of the ESAB Minutes
- Project Officer's feedback from last meeting
- Response:
  - ▣ Workshop at ISPRA
  - ▣ Letter to all partners
  - ▣ Bilateral discussions and Telcos with partners

- Ethical Monitoring Report
- New round of approvals
- Discussion:
  - ▣ How to strengthen this component? How to foster the awareness of research ethics?



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## ISSUES BROUGHT UP IN THE ETHICAL MONITORING REPORT D95.31

Stine Bergersen



The report addresses:

- Key ethical issues in year 1 in DRIVER
- The major ethics issues set out in the project description
- The most challenging ethical issues as seen by SP9 and consortium members
  
- The report includes feedback from 25 DRIVER partners.
- Review: Ingierd and Hadjimatheou

Ethical Monitoring Questionnaires filled out by 25 DRIVER partners required to give input as per DRIVER DoW

6 sections:

- 1) Basic info
- 2) Ethical approvals: contact with DPA? What type of experiment do you do? Difficulties with approvals? Tailored question. New ethical issues?
- 3) Human participants: Are you affecting the public? Vulnerable groups? Humans at risk of harm?
- 4) Informed consent: used the template? Foreseen problems?
- 5) Interaction with SP9: What can we do better? How are we influencing you? **Issues for ESAB?**
- 6) Other issues: open question.

- ❑ The Societal and Ethical Advisory Board
- ❑ Interaction in relation to the DRIVER meeting week in Ispra February 2015
- ❑ Issues of ethical concerns which has become apparent to PRIO as SP9 leader
- ❑ The report draws upon some core points from previous deliverables within SP9 to repeat and refine them

- Most partners have already been in contact with DPA for the project, half of which used the templates PRIO provided.
- The majority reported that their experiments will not affect the public, but this might be the case for the “field experiments” (e.g. bystanders in the crowd tasking experiment).
- From what they know about their planning so far, experiment participants are reportedly not at risk for physical or mental harm.
- **Difficulty in getting informed consent in advance, as the activity should contain an element of surprise to be realistic (e.g. the scenarios) → Please advise.**

- What can SP9 do better?
  - Checklists for experiments (do I need approval?)
  - SP9 should provide less theoretical information and less concepts, and more recommendations in “action form”.
  - Establish a contact point in each country to deal with local authorities.
  - SP9 should review the design of the experiments before applications is submitted to the relevant data protection authorities.

## How has SP9 influenced your work?

- Practical guidance: “SP9 has provided valuable practical guidance and help in planning for data protection and approval- issues”
- Awareness raising: “SP9 has raised awareness of which activities and experiments might trigger the need for particular attention and approvals”
- Encouragement: “SP9 has also encouraged partners to investigate ethical issues more thoroughly, and has reinforced the need to consider ethical issues whenever dealing with human participants”
- No direct impact: “SP9 has not been needed, yet”

# Three Issues raised by the Partners

Please advise.

- “What is the difference between sensitive and non-sensitive data?”
  - ▣ Definition provided
  - ▣ DPA responsible for national guidelines
- “Where and how to store personal data?”
  - ▣ Distinction between “putting the data on a central server” and “keeping the data on the user’s device”
  - ▣ In general: data must be stored safely and securely
- “Are there alternatives to a “formalization” of Research Ethics?”
  - ▣ Too much administration, too many requirements, could «scare off» external participants in the experiments.
  - ▣ Important for SP9 to state that research ethics is *not* a product or invention of SP9, but of European legislation.

Question from the PMC meeting in Berlin 18.09.2015:

- In international experiments with a difference in *where the data is stored, who runs the experiment, who actively collects the data in different countries (i.e. with a DRONE)* → who is responsible for getting approval?





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# SOCIETAL IMPACT ASSESSMENTS: A FRAMEWORK



- CM is not just about confronting society with a set of solutions – they have to work and be accepted in order to be effective.
- Sometimes CM produces the opposite effect in society, namely that it creates insecurity, uncertainty, suspicion. It can create political controversy.
  - For example excessive data collection by the use of drones for CM.
- CM should work as an incentive: the aim is largely to incite the active participation of citizens without overburdening them with responsibilities; that can only happen if it doesn't produce negative effects for society at large.
- Because there is already a raised awareness about potential impacts on society in CM “politics”, there is a higher demand for societally friendly solutions in CM.

## Project Structure



Weighing the positive and negative aspects are difficult, sometimes problems are unsolvable.

- Many solutions can create both positive and negative effects.
- What is considered “positive” and “negative” may differ across contexts.

Societal effects are often long-term, disproportionate or not easily measurable.

- A societal effect is disproportionate when it only hits some groups in society.
- It is difficult to quantify or measure the level of distrust in the population, yet it has a real impact on the effectiveness and the applicability of the solution

# Snapshot of the SIA Framework

CRITERIA

CATEGORIES

SUB-CATEGORIES

| Subcategory  | Dimensions for task 92.1: Insecurities (Unease, Fear) and Secondary Risks |           |                                |               |        |                     |                       |            |              |                            |   |                    |           | Measures as of WP/Tasks                         |
|--|---|-----------|--------------------------------|---------------|--------|---------------------|-----------------------|------------|--------------|----------------------------|---|--------------------|-----------|---|
|  | Emo. Insecurities   |           | Secondary risks                |               |        |                     |                       |            |              |                            |   |                    |           |   |
|  | 1 Fear  |           | 2 Deploying technologies       |               |        |                     |                       | 3 Legality |              |                            | 4 Socio-economic  |                    |           |   |
|  | Unease  | Suspicion | Function creep vs. Limitations | Applicability | Misuse | New Vulnerabilities | Technology Dependency | Legality   | Truthfulness | Efficiency & Effectiveness | Impacts on market (production, consumption, innovation) | Economic Stability | Insurance |   |
| Category: Data & Information                       |   |           |                                |               |        |                     |                       |            |              |                            |   |                    |           |   |
| Collection & Storage                               | X   | X         | X                              | X             | X      | X                   | X                     | X          |              | X                          |   |                    |           | 36.3, 43.1, 43.2, 43.4, 45.2, 45.3, 45.4, 55.4  |
| Facilitating Data Processing                       |   |           | X                              |               | X      | X                   | X                     | X          |              | X                          |   |                    |           | 43.5, 72.4, 72.4                                |
| Analysis & Evaluation                              | X   | X         | X                              | X             | X      |                     |                       | X          |              | X                          | X   | X                  |           | 36.3, 43.1, 43.2, 43.3, 43.5, 52.4, 53.2, 55.4  |
| Exchange   | X   | X         | X                              |               | X      |                     |                       | X          | X            | X                          |   |                    |           | 36.3, 43.1, 43.2, 43.3, 43.5, 52.4, 53.2, 55.4  |
| Category: Identification Tools & Technologies      |   |           |                                |               |        |                     |                       |            |              |                            |   |                    |           |   |
| Gap analysis                                       | X   |           |                                | X             | X      | X                   |                       | X          |              | X                          | X   |                    | X         | 34.1, 52.2, 53.1                                |
| Situational Analysis & Impact Assessment, Mapping  | X   | X         | X                              | X             | X      | X                   | X                     | X          | X            | X                          | X   |                    | X         | 43.2, 43.4, 43.5, 44.2                          |
| Early warning, Risk Analysis, Forecasting          | X   | X         |                                |               | X      | X                   |                       |            |              | X                          | X   | X                  | X         | 43.1, 43.3, 44.1                                |
| Costs & Effectiveness                              | X   | X         | X                              | X             | X      | X                   |                       |            | X            | X                          |   |                    |           | 44.1, 44.5                                      |
| Communication Systems                              |   |           | X                              | X             | X      | X                   | X                     | X          |              | X                          |   |                    |           | 45.2, 45.3, 45.4                                |
| Category: Networking & International Collaboration |   |           |                                |               |        |                     |                       |            |              |                            |   |                    |           |   |
| Networking & Intl. Collaboration                   | X   | X         | X                              | X             | X      | X                   |                       | X          |              | X                          |   |                    |           | 33.2, 36.3, 44.2, 45.2, 45.3, 45.4, 52.2, 55.4  |
| Category: Communication Training                   |   |           |                                |               |        |                     |                       |            |              |                            |   |                    |           |   |
| Communication Training                             |   | X         | X                              | X             | X      | X                   | X                     | X          |              |                            |   |                    | X         | 35.2., 35.3, 35.4, 36.2, 43.3, 44.3, 45.3, 55.4 |

## **1. Data & Information**

Collection & Storage

Facilitating Data Processing

Analysis & Evaluation

Exchange

## **2. Risk, Damage & Needs Assessment**

Gap analysis

Situational Analysis & Impact Assessment

Early warning, Risk Analysis & Forecasting

## **3. Communication**

Between crisis managers

From managers to the public

From the public to managers

Information preparation

Media & policy

## **4. Community Engagement**

Training communities

Measuring resilience

Volunteer Management

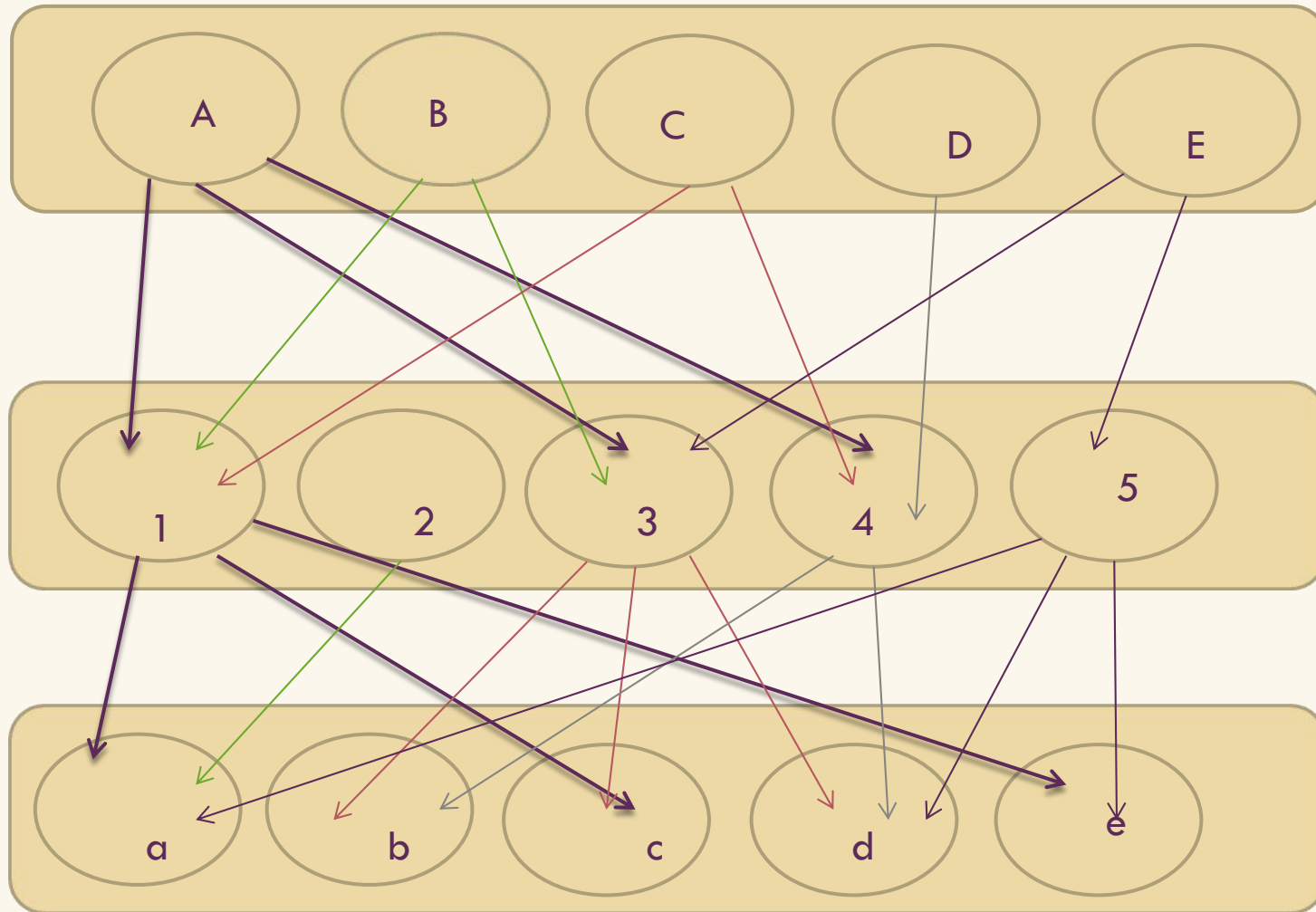
## **5. Resilience Logistics & Contingency Plans**

Resources, Supply chains & Contingency Plans

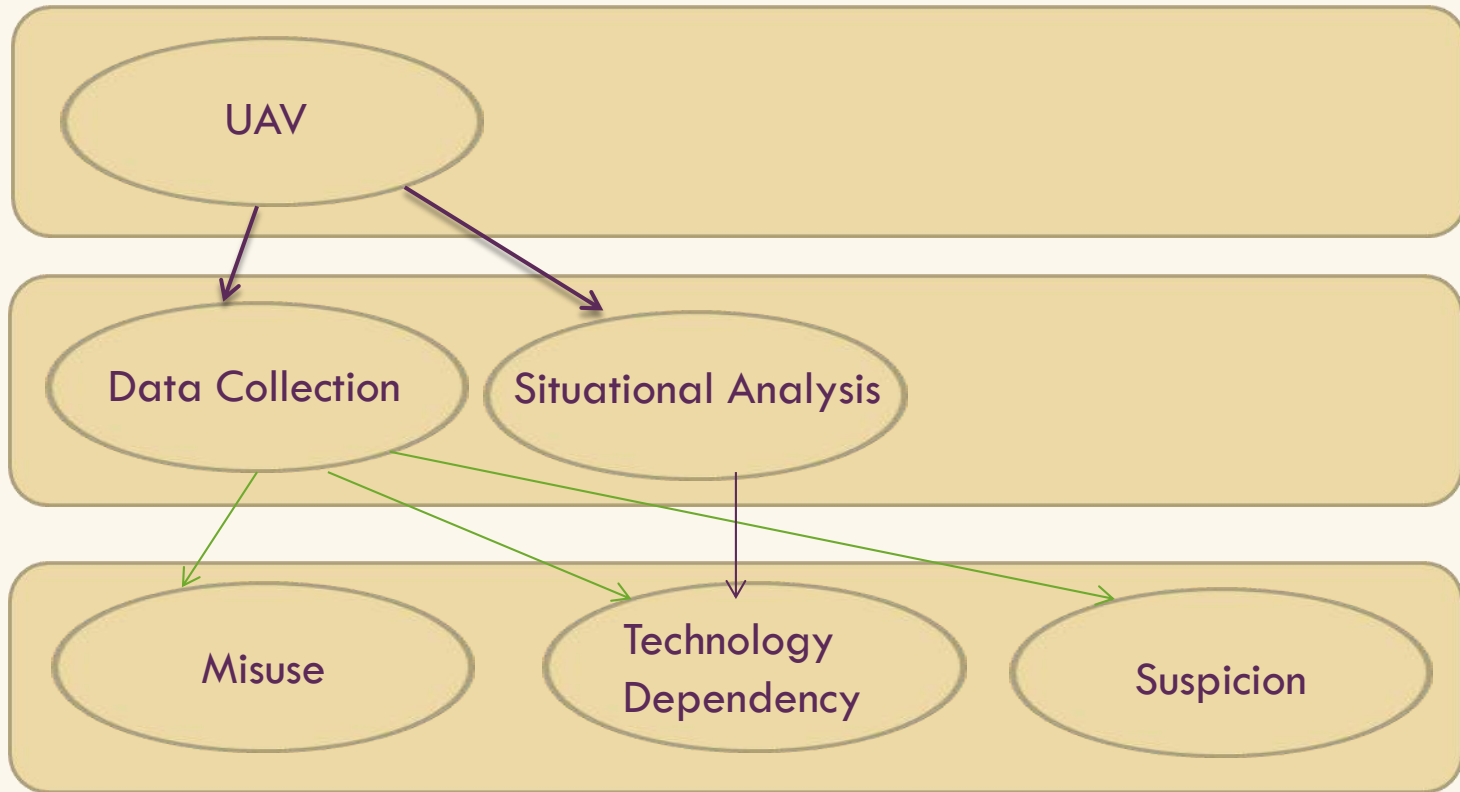
Core functions in the city

## **6. Scenarios & Experimentation**

# Putting the framework to use



# Example: UAV as a CM solution





# What is the output of the system (so far)?

30

- ▣ A systematization of DRIVER functions
- ▣ A list of DRIVER- tasks relevant for each subcategory
- ▣ A short intro explaining the subcategory
- ▣ A criteria system & their definitions
- ▣ Identification of relevant criteria & assessment
- ▣ A DRIVER- specific example
- ▣ A list of concrete recommendations

**1 Unease – Calmness**

**2 Suspicion – Trust**

**3 Function creep - Limitations & Specialised solutions/controlled use**

**4 Applicability – value added**

**5 Sustainability**

**6 Misuse - Protection**

**7 New vulnerabilities – Innovation/progress/development**

**8 Technology dependency – flexible solutions**

**9 In/justice & In/equality**

**10 Legality**

**11 Social Cohesion & Solidarity**

**12 Participation**

**13 Diversity**

**14 Open society - control**

**15 Cultural & gender sensitivity**

**16 Accountability**

**17 Transparency**

**18 Integrity**

**19 State-citizenship relationship**

**20 Political reputation**

**21 Negative/positive standardization**

**22 International cooperation**

**23 Suitability, necessity & proportionality**

**24 Dignity & non-discrimination**

**25 Privacy & data protection**

**26 Freedom & protest**

- Are they formulated accurately, in a clear language, easy to understand?
- Are criteria missing?
- Could some criteria be taken out or merged?



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## CONCLUSIONS & ACTION POINTS

J. Peter Burgess

- PRIO Distributes the Minutes
- How to store sensitive data? Additional requirements?
- Research results about responses to informed consent forms?
- Data collection across different countries → who applies for approval?
- PRIO distributes the already re-worked list of criteria to be commented upon