Driving Innovation in Crisis Management for European Resilience

D913.51 – REPORT ON THE TRAINING SESSIONS FOR SOCIETAL IMPACT ASSESSMENTS IN THE CONSORTIUM

SP91 - PROJECT MANAGEMENT

JANUARY 2018 (M45)

This project has received funding from the European Union's 7th Framework Programme for Research, Technological Development and Demonstration under Grant Agreement (GA) N° #607798

Project information

Project Acronym:	DRIVER+
Project Full Title:	Driving Innovation in Crisis Management for European Resilience
Grant Agreement:	607798
Project Duration:	72 months (May 2014 – April 2020)
Project Technical Coordinator:	TNO
Contact:	coordination@projectdriver.eu

Deliverable information

Deliverable Status:	Final
Deliverable Title:	D913.51 – Report on the Training Sessions for Societal Impact Assessments in the Consortium
Deliverable Nature:	Report (R)
Dissemination Level:	Public (PU)
Due Date:	January 2018 (M45)
Submission Date:	08/02/2018
Sub-Project (SP):	SP91 - Project Management
Work Package (WP):	WP913 – Research Ethics and Societal Impact Assessments
Deliverable Leader:	EOS
Reviewers:	Marcel van Berlo, TNO
File Name:	DRIVER+_D913.51_Report on the Training Sessions for SIAs in the Consortium.docx

Revision Table

Issue	Date	Comment	Author
V0.1	03/11/2017	Initial draft	Elodie Reuge, EOS Stine Bergersen, PRIO Bruno Oliveira Martins, PRIO
V0.2	03/11/2017	Peer Review	Marcel Van Berlo, TNO
V0.3	22/12/2017	Second draft	Elodie Reuge, EOS Stine Bergersen, PRIO Bruno Oliveira Martins, PRIO
V0.4	26/01/2018	Peer review	Marcel van Berlo, TNO
V0.5	05/02/2018	Final check and approval for submission	Tim Stelkens-Kobsch, DLR, Quality Manager
V0.6	07/02/2018	Final check and approval for submission	Peter Petiet, TNO, Project Director
V1.0	08/02/2018	Submission to the EC	Francisco Gala, ATOS

The DRIVER+ project

Current and future challenges due to increasingly severe consequences of natural disasters and terrorist threats require the development and uptake of innovative solutions that are addressing the operational needs of practitioners dealing with Crisis Management. DRIVER+ (Driving Innovation in Crisis Management for European Resilience) is a FP7 Crisis Management demonstration project aiming at improving the way capability development and innovation management is tackled. DRIVER+ has three main objectives:

1. Develop a pan-European Test-bed for Crisis Management capability development:
    - Develop a common guidance methodology and tool (supporting Trials and the gathering of lessons learnt.
    - Develop an infrastructure to create relevant environments, for enabling the trialling of new solutions and to explore and share Crisis Management capabilities.
    - Run Trials in order to assess the value of solutions addressing specific needs using guidance and infrastructure.
    - Ensure the sustainability of the pan-European Test-bed.
2. Develop a well-balanced comprehensive Portfolio of Crisis Management Solutions:
    - Facilitate the usage of the Portfolio of Solutions.
    - Ensure the sustainability of the Portfolio of Solutions.
3. Facilitate a shared understanding of Crisis Management across Europe:
    - Establish a common background.
    - Cooperate with external partners in joint Trials.
    - Disseminate project results.

In order to achieve these objectives, five sub-projects (SPs) have been established. **SP91** ***Project Management*** is devoted to consortium level project management, and it is also in charge of the alignment of DRIVER+ with external initiatives on crisis management for the benefit of DRIVER+ and its stakeholders. In DRIVER+, all activities related to Societal Impact Assessment (from the former SP8 and SP9) are part of SP91 as well. **SP92** ***Test-bed*** will deliver a guidance methodology and guidance tool supporting the design, conduct and analysis of Trials and will develop a reference implementation of the Test-bed. It will also create the scenario simulation capability to support execution of the Trials. **SP93** ***Solutions*** will deliver the Portfolio of Solutions which is a database driven web site that documents all the available DRIVER+ solutions, as well as solutions from external organisations. Adapting solutions to fit the needs addressed in Trials will be done in SP93. **SP94** ***Trials*** will organize four series of Trials as well as the final demo. **SP95** ***Impact, Engagement and Sustainability***, is in charge of communication and dissemination, and also addresses issues related to improving sustainability, market aspects of solutions, and standardization.

The DRIVER+ Trials and the Final Demonstration will benefit from the DRIVER+ Test-bed, providing the technological infrastructure, the necessary supporting methodology and adequate support tools to prepare, conduct and evaluate the Trials. All results from the Trials will be stored and made available in the Portfolio of Solutions, being a central platform to present innovative solutions from consortium partners and third parties and to share experiences and best practices with respect to their application. In order to enhance the current European cooperation framework within the Crisis Management domain and to facilitate a shared understanding of Crisis Management across Europe, DRIVER+ will carry out a wide range of activities, whose most important will be to build and structure a dedicated Community of Practice in Crisis Management, thereby connecting and fostering the exchange on lessons learnt and best practices between Crisis Management practitioners as well as technological solution providers.

Executive summary

This deliverable presents an overview of a structured methodology for assessing the societal impact of Crisis Management (CM) solutions. This methodology is designed to be used by the trainers who will train the DRIVER+ consortium in how to carry out Societal Impact Assessments (SIAs). A SIA refers to assess the way in which crisis management solutions might create (unintended) negative or positive impacts on society at large.

This deliverable builds on the SIA framework (delivered in D840.11) and presents three main components as part of conveying training sessions:

- A presentation of the concept of SIA, and why this is crucial to European CM.
- A presentation of the DRIVER+ methodology for doing SIA.
- The description of the trainings on SIA themselves.

This deliverable also contains the set-up of a training booklet for the trainees (Annex 2) and the set-up of an explanatory step-by-step guide for the trainers (Annex 3). These documents[1] will be used during the SIA training sessions and will be tailored to the specific needs of the groups participating in the different SIA training sessions.

The direct purpose of the SIA trainings within DRIVER+ is to train the consortium partners by using a concrete methodology which is derived from several scientifically accepted methods, focusing on how to carry out a SIA of the CM solutions the partners are working with. The purpose is to avoid negative societal side effects and to foster positive societal impacts.

Within DRIVER+, the SIA training sessions will be conducted by the authors of this deliverable. However, the ultimate goal of the work on societal impact in DRIVER+ is to create a sustainable and usable methodology for integrating SIA practically into CM beyond the scope of DRIVER+. To this end, the SIA will be taken further within DRIVER+ SP95 work on sustainability and standardisation.

The training methodology and the training components presented here ensure that the SIA framework (as described in D840.11) and the first version of the actual assessments (delivered in D840.21) are conveyed to the DRIVER+ consortium partners and ultimately to all CM professionals.

Towards the end of the project, the full SIA concept (developing the current training components into final SIA training modules) will be updated. The final version of the SIA training will be described in the deliverable D913.52 (Training Modules for Societal Impact Assessment), to be submitted in October 2019.

[1] For the sake of readability, only impressions of both the training booklet for trainees and the trainer guide for trainers have been put in this deliverable. Both documents are available online on the DRIVER+ website: http://www.driver-project.eu/.

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List of Acronyms

Acronym	Definition
CM	Crisis Management
CoW	Collaborative Workspace
DoW	Description of Work
Dx.x	Deliverable
EU	European Union
FP7	Framework Programme 7
NEPA	National Environmental Policy Act
PBL	Problem-Based Learning
SIA	Societal Impact Assessment
SP	Sub-project
SOTA	State of the Art
TBL	Team-Based Learning
UAV	Unmanned Aerial Vehicles
WP	Work Package

1. Introduction

1.1 Objectives

This deliverable is designed to be used by the trainers who will train the DRIVER+ consortium in how to carry out Societal Impact Assessments (SIAs), i.e. assess the way in which crisis management (CM) solutions might create (unintended) negative or positive impacts on society at large. While the target group of this deliverable is the trainers, the target group of the SIA training in general are the consortium partners working with the various CM solutions in the project.

The training sessions will be tailored to provide the consortium partners with a practical method for conducting SIAs on the CM solutions that they are working with. The first set SIAs [1] serves as a starting point for understanding and using the method, which is based on a SIA framework [2]. Via the SIA trainings, the objective is for the consortium partners to be able to conduct such assessments themselves, based on the solutions they are working with. This will be done via a set of training components, which are the key parts of this deliverable. Concretely, the present document delivers three types of training components that lead the consortium partners through SIAs step-by-step:

1. A presentation of the concept of SIA, and why this is crucial to European CM.
2. A presentation of the DRIVER+ methodology for doing SIA.
3. The description of the trainings on SIA themselves.

The general and broad approach to the SIA training is chosen here to ensure that the consortium partners recognize how crucial the societal dimension is to CM. It also gives the opportunity to draw on the expertise of the various partners during the training sessions in order to improve the SIA concept over time. The integration of societal impact assessments into the project is thus a two-way approach, i.e. a dialogue between DRIVER+ partners representing different kinds of expertise in the project. It brings together solution providers, practitioner organisations, and researchers to learn from each other, exchange ideas, perspectives and visions, and thus capitalize on available knowledge.

During the initial phase of the project, the consortium partners have already been informed about the forthcoming training sessions and about the importance of SIA at several occasions. Some introductory training sessions were already given at the General Assembly in Lund, Sweden (November 2015). A first training session addressing the former SP5 was held in The Hague, the Netherlands (April 2016).

In order to ensure broad participation, upcoming training sessions will be organized back to back with other consortium meetings and events. Trainers will thus attend meetings where most project members are gathered. It is important that the trainers take all possible steps to avoid absenteeism; therefore, relevant trainees will be informed in advance and the relevance of the training will be explained. The implementation of the training calendar (Annex 3.2) and the more practical sides of the organization of the training sessions will take place within task 913.5 of DRIVER+. The training sessions will take place throughout the year 2018, in various places, following the path put in place for the meetings.

Those DRIVER+ partners who have participated in a SIA training session are expected to utilize what they learned (recommendations, method, understanding of the concept and process) throughout the project. In addition, the final training modules (which will be developed based on the feedback from the SIA training sessions during the project) delivered at the end of the project will be a sustainable output of the project. Moreover, attention for societal impact will be integrated into the Guidance methodology developed within SP92. After the SIA training sessions, the trainees will be asked to fill out a SIA questionnaire (see Annex 2.5). This feedback is crucial in order to revise and refine the current training components into the final SIA training modules.

1.2 Trainings as a prerequisite for successfully conducting SIA

The SIA concept is designed to integrate societal impact assessments into the project. The practical understanding and implementation of this concept happens mainly via the organisation of the training components to be put in place, as will be described in the following section and is illustrated in Figure 1.1.

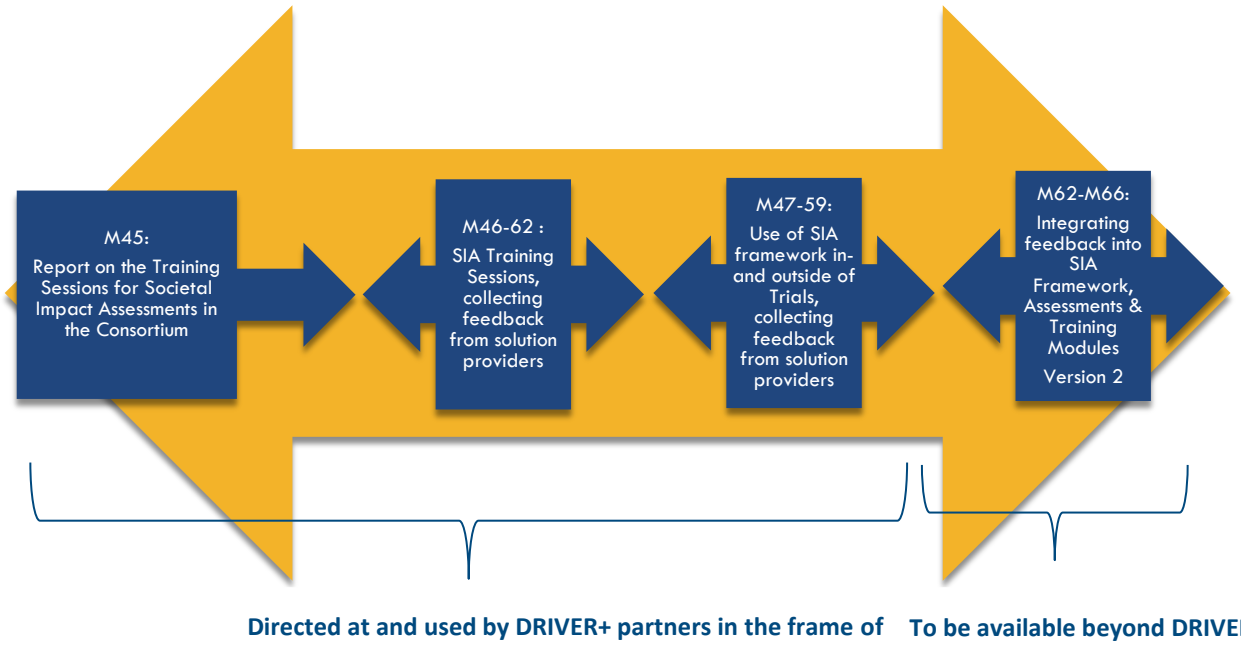

Figure 1.1: The SIA approach in DRIVER+

Given that this deliverable presents the first version of the SIA training components, the Annexes are to be understood as a "prototype" version to be improved throughout the project via the dissemination of the sessions and following the reports produced by the trainer after each session which takes the trainees' feedback into account. These components are based on the SIA framework version 1 presented in [2] and on the first set of societal impact assessments (by using the SIA framework) presented in [1].

The training sessions are divided into several parts called "training components". Here, the trainees are introduced to a concrete method for implementing SIA in their work and environment. They also learn how to conduct SIAs themselves, through team exercises during the trainings.

To ensure that the insights gained during training sessions and trials are systematically collected and utilized, a questionnaire (Annex 2.5) will be distributed at the end of each session. This questionnaire is also integrated into the training material. At the end of the training sessions, a short report will summarize whether the learning objectives have been met, taking into consideration the feedback on the components and the results of the questionnaire. This information constitutes the basis for reflecting on how to improve the learning process before a new session takes place.

The design and implementation of the SIA components serve as a vantage point for innovation in CM. They provide a methodology, a set of assessments and relevant training material for practically implementing SIA into CM. Since the final SIA training modules will be available in open access through the DRIVER+ website, they will be ready for implementation in future CM projects. The ultimate goal is to contribute to making SIA a standard procedure in CM at large, by making the DRIVER+ approach a basic reference model for SIA in European CM.

1.3 Structure of this deliverable

The deliverable is structured in the following way. The introduction (section 1) describes the purpose of the deliverable and the target group of the trainings. It also describes how the deliverable fits into the WP913 (SP91) structure and objectives, and how it relates to the SIA framework (D840.11). Section 2 provides the

methodological background and the method used in the trainings, i.e. the DRIVER+ approach to societal impact. Section 3 outlines the training components, the way the trainers need to prepare, how to follow the steps as described in the training components, how to collect lessons learned and how to revise the training components according to the feedback collected from the trainees. The conclusion (section 4) includes final remarks and the way forward.

The Annexes to this document contain:

- Terminology (Annex 1) regarding key terms used in this deliverable.
- Training booklet (Annex 2) to be used by the trainees.
- Step-by-step guide (Annex 3) for the trainers.

2. Overall SIA training methodology

The steps presented in this deliverable endorse a centrality of societal issues in the field of CM. However, the concept of SIA has been emerging very slowly and cannot yet be considered as a mainstream concept in research on CM. Although several interesting general reflections about the need of societal impact of research have been developed recently [3] comprehensive SIA frameworks tailored for the CM context do not exist yet.

Therefore, the first task of the SIA training components is to demonstrate that the SIA training is a crucial, innovative and necessary supplement to the implementation of the CM solutions. A SIA is not simply an add-on; it is an integral part of assessing the practical functioning of solutions. Ethics are used to be taught at universities as stand-alone courses [4][5]. Unfortunately, even though students successfully completed the modules, their behaviour did not change when confronted with decisions that entailed an ethical element in other modules in their course [6][7]. As a result of these failures to concretely understand the importance of the concept, and to translate and use ethics education into the practice in general, business schools have since started to embed ethics and societal aspects into the entire curriculum. Ethical[2] and societal[3] issues must be thus always directly addressed whenever they appear.

Examples from other fields, such as the US 1994 guide for assessing the social consequences [8] are likely to follow from specific policy actions and specific government actions particularly in the context of the U.S. National Environmental Policy Act of 1969 [9] and have been taken into consideration for elaboration of the DRIVER+ SIA methodology. In many cases, the efforts to assess societal impacts include only so-called "social benefits", without mentioning or considering potential negative impacts. Such an omission, intentional or not, has a clear impact on the assessment, which cannot be considered complete. Furthermore, approaches to assessing societal impact are often about environmental consequences that might arise, such as assessments of the community impacts of natural disasters [10] or soil management [11].

2.1 The overall objective of the SIA trainings

DRIVER+ is structured with the aim of creating a common practice in which conducting and implementing SIAs becomes a natural part of the norms and culture involving the work of solution providers and practitioners. Within this broader objective, the SIA component in DRIVER+ seeks to start fostering a cultural change in the field of CM in which an evaluation of societal impacts turns out to be an integral part.

Some lessons have been learned from the trainings already conducted in the project. One of them is that providing an interactive training approach, using concrete examples adapted to the audience, is key to a successful training on SIA; the content of the training component must be clear and straightforward, followed by a concrete empirical example coming from the field to better illustrate the concept being approached.

One of the most challenging and important tasks in any educational effort in general is to ensure that the training will be beneficial to the work and future perspectives of the trainees, i.e. that it answers to a gap or to a need. When engaging with researchers and practitioners, this obstacle is usually easily overcome when it falls directly into their domain. Yet, this task can become challenging when aimed at introducing a topic that appears to be "external", or may look like a foreign and new concept to apply, and that is not traditionally a major part of their day-to-day work. For example, the establishment of clear standards for responsible use while elaborating a new technology can be challenging. Thus, the elaboration of SIA has to be adapted on a case-by-case basis and the use of its framework needs to be implemented in a very concrete manner.

[2] Ethical: "Relating to moral principles or the branch of knowledge dealing with these", in https://en.oxforddictionaries.com/definition/ethical, consulted on the 15th of October 2017.

[3] Societal: "Relating to society or social relations". In https://en.oxforddictionaries.com/definition/societal, consulted on the 16th of October 2017.

In DRIVER+, training and awareness rising are understood as required steps for introducing a new and crucial concept in the CM environment and for improving the way in which the relevant stakeholders are working. At an ever more concrete level, the training on SIA should enable trainees to understand concerns about the effects on society of a specific function of CM solutions [12]. Trainees should understand that the DRIVER+ function of CM solution may impact society in various ways, and the training sessions should develop this competency among the trainees. This competency, developed through the project and meant to be applied beyond, entails that participants will reach the following objectives, as illustrated in Figure 2.1.

Figure 2.1: Main objectives of the SIA trainings

Any training and educational program needs to define at the outset what sort of learning objectives it is supposed to achieve. These objectives can range from mastering a very specific task (or even part–task), e.g. how to do an integration of a function of CM solution or how to use a specific software tool, to acquiring "competencies" and "integration of knowledge, skills, judgment and attitudes". Learning objectives can also be about learning a specific skill to develop competencies, which entails that trainees are able to transfer and apply the skills acquired in the training to novel problems [13].

In the case of DRIVER+, the whole training approach is designed to illustrate that not every kind of effect of functions of CM solution can be calculated or expressed by a number, and that these effects may have considerable societal impacts, especially if CM solutions experience societal resistance in the implementation of a certain measure or technology[4]. With regards to conducting trainings on how to incorporate SIA into the work, the first step is to identify what the solution the trainees are working with is actually doing. This refers not only to the technical functionalities but merely to the purpose the solution has. For example, a certain type of UAV can be assigned with several technical features or functions, but in order to be able to assess the potential societal impact of using such an UAV, we need to know more about the societal context in which the UAV can be used. For example: is it employed in remote or populated areas? Does it collect data, and if so, which kind of data? Does it exchange data between different CM actors? In sum, the trainers need to be aware of the functions of solutions, beyond the technical specifications, in order to train the consortium in how to assess their potential impacts on society.

[4] For example, can the use of mobile applications for collecting information from the public during a crisis have negative effects that were maybe not foreseen? It is possible to imagine, e.g. that there could be privacy issues with the use of the application or that the data could risk being misused for other purposes? And could this lead to the population being hesitant towards contributing with data through such solutions, reducing the acceptability of such measures in CM? More examples of societal impacts like this can be found in D840.21.

At the beginning of each component, specific training objectives are defined, presented and discussed with the trainees involved in the trainings. The overall learning objectives for the trainee participating in the SIA training are presented in Figure 2.2.

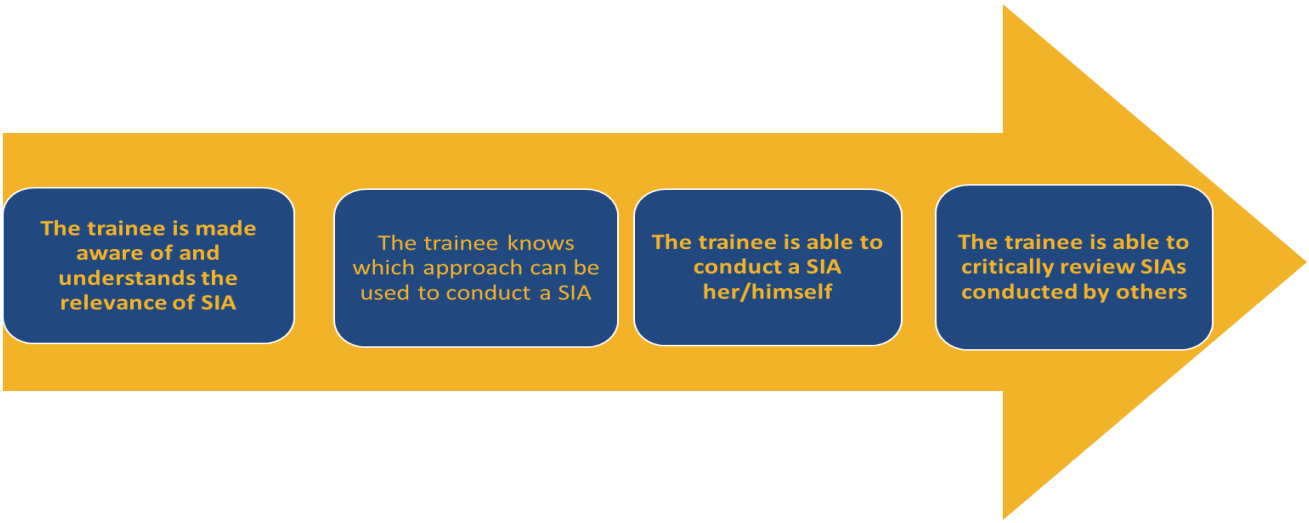

Figure 2.2: Overall learning objectives for trainees

The use of SIAs becomes systematic and happens:

- Before the design of the function of CM solution and the final decision to go for a specific solution involving it.
- During the implementation of the function of CM solutions.

SIA trainings face additional challenges regarding the issue of transferability of knowledge. According to [14] the first step of knowledge transfer is to recognize that a transfer is not an act, as typically modelled, but a complex and necessary process to be seen as a whole. This idea is embedded in DRIVER+'s SIA approach: relying upon a gradual learning process, it will start with the familiarization of the SIA framework in itself, the justification of its use, followed by training the trainees in actually applying the framework. Any concrete and tangible result, experienced or known by the trainers and the trainees, is more welcome, user-friendly and valuable than a general and vague assumption of what could be the potential impact.

Also for this reason, the SIA booklet (see Annex 2) is distributed to the trainees two weeks before the training sessions, serving as support to the SIA training components. The booklet (Annex 2) consists of a detailed description of the objectives, expectations and key terms relevant for the SIA trainings sessions. Defining the objectives and expectations and understanding the meaning of the key terms involved is an important first step to understanding and creating a common ground for discussions. An active involvement of both the trainers and the trainees is crucial for a successful performance of the training.

To summarize, SIA is an integrated part of DRIVER+, built bottom-up on the concrete functions of the solutions existing in the project, and delivered systematically and gradually to the project partners via their participatory and active role during the trainings.

2.2 The characteristics of the training groups

According to [15] learning is a process that is influenced by the surroundings and environment that an individual is exposed to. There can thus be numerous challenges influencing the targeted audience when examining a new topic, and such challenges need to be taken into consideration within the implementation of the SIA trainings. Knowing the target audience, in order to adapt the learning content to their characteristics, is crucial to stimulate the learning process. While the training sessions generally target the full consortium, a special focus is on solution providers and end-users.

The main issues mentioned here are challenges, due to both the specific subject and the targeted audience, that have been observed during the first training sessions carried out, and that need to be tackled within

the frame of the DRIVER+ societal impact training sessions. It is not claimed that the training per se would trigger interest on societal issues, but it will start by raising awareness on the topics. The first challenge is to answer to traditional and emerging concerns in CM (relating to societal impact), while managing to motivate the DRIVER+ consortium partners to consider and reacting to these issues before designing, implementing and using their solutions and related functions.

Any SIA training delivered within DRIVER+ needs to consider the challenges of introducing novel concepts into established professional communities that might be seen as "external" to the field. This will happen in several ways, as illustrated in Figure 2.3:

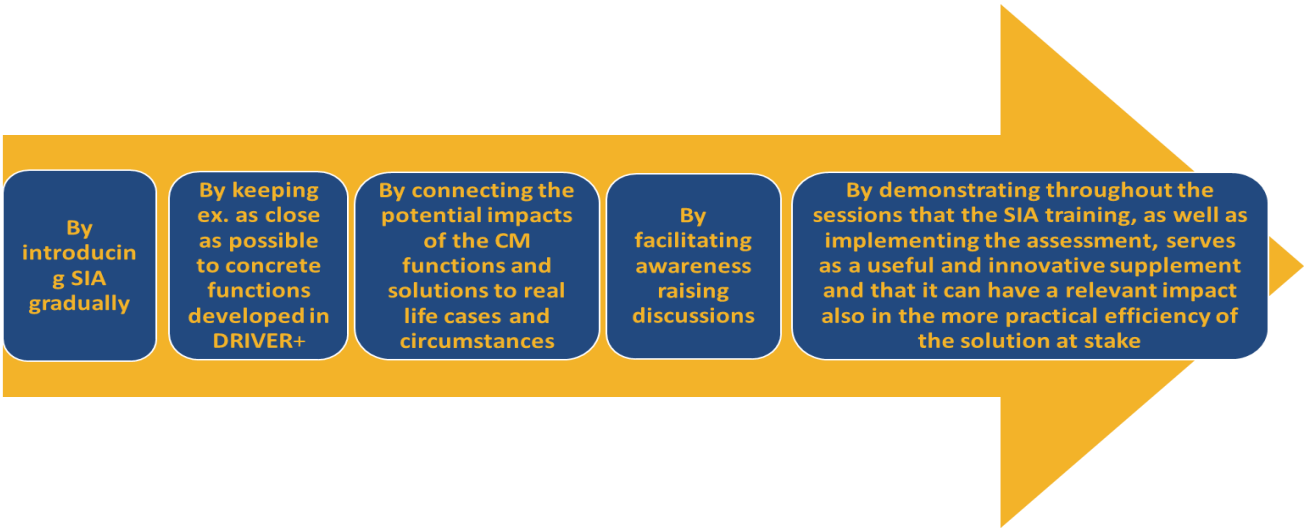

Figure 2.3: Success keys of the SIA trainings

Representing their professional communities, trainees should appreciate the specific and concrete examples meant to be discussed during the training sessions. They should be aware of how solutions may have an unexpected societal impact, which in turn affects the deployment and costs of the respective solution. The trainings will equip trainees with the tools to identify and incorporate societal impact considerations into their work with a concrete CM solution. The approach to SIA in DRIVER+ not only raises awareness, but also seeks to develop the skills for the trainees to address problems of societal impact on their own.

2.3 The active learning methodology to stimulate the relevant learning process

In the past decades, the method of active learning has become one of the key concepts in the educational change [16]. The active learning method is central in the way that it tries to move away from the traditional teacher-student lecturing model towards a horizontal model where students learn from each other through reading, writing, discussing and problem solving. Especially the selection and use of explanatory cases has been identified as an important factor in increasing the students' understanding of the material. While there are many strategies surrounding the use of cases, the success of training is determined by five attributes (see Figure 2.4).

Figure 2.4: Five attributes of a successful training according to Active Learning

In DRIVER+, these five attributes are e.g. addressed in the following way:

1) Relevant: the examples and the assessments are derived directly from the functions of CM solutions that the trainees are working with.
2) Realistic: the examples and the assessments are derived directly from the functions of CM solutions that the trainees are working with.
3) Engaging: the choice of using the active learning method (leading to the combination of team-based learning and problem-based learning - this point will be further developed and explained in section 2.4) fosters engagement, and in addition the case-based parts of the training sessions have been experienced as particularly vital for engaged discussions.
4) Challenging: the potential abstraction of the concept of SIA can be challenging for trainees without any experience in societal impact. The issue, being known by the trainers, will be addressed and countered, by sharing the documents two weeks before the sessions. The trainees will have the chance to become familiar with the concept of the societal impact before the sessions. At the start of each training session, a complete introduction will also be given by the trainers to remind the trainees about the context of SIA and the objectives to be reached.
5) Instructional: the training components are based on prior knowledge, integrated assessments, collect feedback (used to improve the components for the final version), and contain training materials.

The basic understanding of active learning will be the starting point for the SIA training approach, together with two more specific active learning methods called problem-based learning (PBL) and team-based learning (TBL). The use of case studies in education is a central element in these two well-known learning methods. These have been shown to be effective in e.g. teaching ethics to medical students [17][18], dual-use biosecurity to scientists [19][20][21] and in education at professional schools in general [22]. For the SIA trainings in DRIVER+, the following section describes how elements of PBL and TBL are combined to optimize trainee learning.

2.4 Combining PBL and TBL into the SIA training approach

From the basis of active learning, as described above, the following two learning methods will constitute the SIA training sessions in DRIVER+:

- Problem-based learning (PBL) which "is an instructional method of hands-on, active learning centred on the investigation and resolution of messy, real-world problems"[5].
- Team-based learning (TBL) which "is an evidence based collaborative learning teaching strategy designed around units of instruction, known as 'modules', that are taught in a three-step cycle: preparation, in-class readiness assurance testing, and application-focused exercise. A class typically includes one module"[6].

2.4.1 Characteristics of PBL

The PBL method has been one of the most significant innovations in higher education and professional education [23]. The groups involved in the training first define the "learning issues" they believe each new problem represents; decide how to jointly solve the problem, and which task will be conducted by whom. Thus, PBL implementation requires ample resources. Likewise, large classroom situations require an adequate number of trainers to act as facilitators to the groups [24]. PBL has been the subject of considerable interest and debate particularly in medical undergraduate and, increasingly, postgraduate education in the last decade. The supporters of PBL highlight how it is a way of learning that provides a highly motivational environment for acquisition of knowledge, which is usually well received by those who take part in it.

On the other side, the critics argue that PBL is a time-consuming activity, often undertaken by people with a limited appreciation of its complexities. Moreover, it is argued that there is a lack of evidence that PBL translates into better operational competence, questioning the relevance of such intensive learning methods in everyday practice [25].

One challenge when adopting some aspects of the PBL method for the DRIVER+ SIA trainings is the combination of time constraints and trainers and trainees' availability. PBL works extremely well with students over a whole term at university. But the SIA trainings in DRIVER+ will only be able to train trainees for a short period of time and with a limited number of trainers.

A PBL exercise consists of the following steps that are displayed in Table 2.1.

[5] https://www.learning-theories.com/problem-based-learning-pbl.html, consulted on the 15th of October 2017.

[6] http://www.teambasedlearning.org/definition/, consulted on the 15th of October 2017.

Table 2.1: The different steps within a PBL exercise

Steps	Achievement in general	Achievement within DRIVER+
The "identification of outcomes / assessments"	PBL fits best with process-oriented course outcomes such as collaboration, research, and problem solving. It can help students acquire content or conceptual knowledge, or develop disciplinary habits such as writing or communication.	In DRIVER+ it means that the trainers have to facilitate that the SIAs has learning outcomes fitting with PBL, and then they will need to develop formative and summative assessments to measure the trainees' learning.
The "design of the Scenario"	Next the trainers design the PBL scenarios with an embedded problem, real and complex related to the content of the session. The key is writing a scenario for the students that will elicit the types of thinking, discussion, research, and learning that need to take place to meet the learning outcomes. Scenarios should be motivating, interesting and generate good discussion.	The examples to be used as scenarios are already indicated in [1], which will be shared with the trainees before the trainings. These scenarios can be used, but others might prove valuable once the target groups of the trainings are defined. The following three scenarios can already be used: • The communication during a crisis. • The use of new technologies. • The place of science in the decision-making process.
The "Research"	PBL research begins with small-group brainstorming sessions where students define the problem and determine what they know about the problem (background knowledge), what they need to learn more about (topics to research), and where they need to look to find data (such as databases or interviews). Groups should write the problem as a statement or research question. They will likely need assistance.	Within the SIA trainings, the trainers, as specialists in the field, will guide the trainees who will remain the main stakeholders of the trainings. The trainees will decide upon group roles and assign responsibility for researching topics necessary for them to fully understand their problem. The trainees then develop initial hypothesis to "test" as they research a solution. Within DRIVER+, it is important to understand that questions and hypotheses can change after trainees find information not meeting their initial beliefs.
The "Performance"	After researching, the students create products and presentations that synthesize their research, solutions and learning. The format of the summative assessments is completely up to the organiser. The step is to be treated as a research fair. Students find resources to develop background knowledge that informs their understanding, and then they collaboratively present their findings, including one or more viable solutions, as research posters to the class.	After the brainstorming session(s), the trainees, divided into groups, will present their conclusions to the other groups and to their trainers. They will be able to present their position on the societal impact of the functions of the solutions shortlisted within DRIVER+.
The "Assessment"	During the PBL assessment step, the trainers will evaluate the group's performance	The trainers will use rubrics to determine whether the trainers have clearly communicated the problem, background, research methods, solution (feasible and research-based), and resources, and to decide whether all group members participated meaningfully. Finally, the ultimate questions of the training will remain: will the trainees be able to use what has been learned during the session? Will they be able to train people themselves?

2.4.2 Characteristics of TBL

The idea of TBL originated from Larry Michaelsen[7] in the late 1970s. Michaelsen was employed at the University of Oklahoma, and was suddenly forced to triple the size of this primary course from 40 to 120 students. Having used group assignments in smaller classes previously, Michaelsen knew that students were usually happier with applying concrete methods rather than to be told about them. On this background, he was convinced that this method would work on larger groups as well, and decided to spend most of the class time for group work. It soon became clear that this strategy was working, and this success materialized in three unexpected accomplishments:

- The students perceived the large class setting as more beneficial than harmful.
- The approach created conditions that would enhance learning in any setting.
- The teacher/trainer enjoyed the experience, since the students were already learning the basics on their own, and he could use his efforts in designing assignments and activities that would underline the value of the topic being taught [15][26].

A TBL exercise usually consists of three distinct parts: preparation, readiness assurance, and an application exercise [22] (see Table 2.2)

Table 2.2: The different steps within a TBL exercise

Steps	Achievement in general	Achievement within DRIVER+
The "Preparation"	The preparation starts several days in advance of the sessions and consists of handing out material that explain the learning objectives as well as specific reading. Trainees are expected to read and study these materials and arrive to the trainings with a precise idea of what kind session they will attend and what they can expect from them.	In DRIVER+, this means that the trainees are asked to familiarize themselves with the distributed materials as listed in the introduction, i.e. relevant sections of [2], and in particular the booklet (Annex 2) which is part of this current deliverable. The PowerPoint presentation (Annex 3.6), which will be followed during the trainings, is also shared in advance of the trainings.
The 'Readiness assurance"	The “readiness assurance” consists of two quizzes. The first is done by trainees individually and then repeated by groups of trainees. This group work is already part of the learning exercise as trainees discuss and compare their individual answers and engage in a discussion. Once all groups have finished their quizzes, the given answers are compared. If there is a disagreement between groups, each group has to explain and defend their answer and more discussion ensues.	In DRVER+, “readiness assurance” happens via the training components designed to explain the methodology of the framework (defined in [2]), and how the SIAs actually come to exist. Then, discussions of concrete assessments relevant for the functions of CM solutions the trainees are implementing are subject to discussion.
The "Application Exercise"	The problems are designed to be more challenging than the “readiness assurance” component, to foster even further discussions.	In DRIVER+, the “application exercise” happens via the training components designed to adapt the functions of CM solutions the trainees are working with, to concrete case studies. The goal here is to prepare them to the future use of the methodology of the framework, meant to become systematic.

[7] TBL’s term and concept was first popularized by Larry Michaelsen, major player in the development of the TBL method in the 1970s.

2.4.3 Application of the hybrid methodology within DRIVER+

For a better understanding of both methods, two tables will be presented. Table 2.3 summarises the main characteristics from both the PBL and the TBL, and Table 2.4 the main differences.

Table 2.3: Main characteristics of PBL and TBL[8]

Instruction characteristic	PBL	TBL
Materials	1) Learning by addressing professionally relevant problems. 2) All students work on the problems.	1) Learning by addressing professionally relevant problems. 2) All students work on the problems.
Format	Learning in small groups.	Learning in small teams.
Teacher	One teacher facilitates each small group.	One teacher facilitates numerous small teams (20 or more).
Group activities and self-study	1) Students start with an initial discussion in the group to determine issues that need further self-study. 2) All students study the same set of learning issues during individual self-study. Thereafter the group meets again to discuss findings.	1) Students start with mandatory pre-assigned reading during individual study. Students fill out a test (individually). 2) Thereafter students discuss the exact same test terms to reach team consensus and receive immediate feedback.
Group characteristics	1) Six to 10 students per group. 2) Students are randomly assigned to the groups. 3) Group members stay together in a group for six to 10 weeks and discuss severe problems.	1) Five to seven students per team. 2) Students are purposefully assigned to the teams. 3) Group members stay together in a teal for at least the duration of a course.
Other curricular activities	A limited number of supplementary lectures are included which take place after self-study and after the final discussion in the small group.	There are no traditional lectures. Students initial exposure to the content is through pre-class study assignments and instructors' input is either corrective or confirmatory in nature and occurs: 1) At the conclusion of the team readiness tests. 2) At the conclusion of the plenary class discussions, in which teams have challenged each other's answers.

[8] In "Should we choose between problem-based learning and team-based learning? No, combine the best of both worlds!", D. DOLMANS, L. MICHAELSEN, J. VAN MERRIENOBOER, C. VAN DER VLEUTEN, published in April 2015 , Medical Teacher newspaper.

Table 2.4: Main differences between PBL and TBL

Instruction characteristic	PBL	TBL
Number of teachers and presence	1) Many teachers, one per small group. 2) Teacher physically present in each group.	1) One teacher for many small teams. 2) Teacher not physically present in each team.
Rooms	Groups work in different small rooms.	Teams work in the same large room in teams.
Pre-class reading/exposure to new content	1) No mandatory pre-class reading assignment before group discussion. 2) Exposure to new content after initial group discussing during self-study and during final group discussion.	1) Mandatory pre-class reading assignment before team discussion. 2) Exposure to new content before the team discussion.
Prior knowledge	Students are not tested, but encouraged to activate their prior knowledge by means of an initial group discussion of professionally relevant problem.	Students are tested individually and as team to check their understanding of the reading assignments and prior knowledge.
Teacher versus student initiated decisions about content to be studied	1) Students generated issues for self-study. 2) Students define what is not yet well understood after an initial group discussion of professionally relevant problem.	1) Teacher defines content for pre-class study based on knowledge required for application problems that will be given during the unit 2) Teacher decides, on the basis of the group test, which issues are not yet well understood.
Feedback	1) Feedback (both confirmatory and corrective) from peers during the final group discussion and if necessary from the teacher. 2) No testing and no inter-group discussions.	Feedback (both confirmatory and corrective) from peers and the teacher during team test, but also from inter-term discussions after teals have revealed their choices, challenged others and attempted to defend their won.
Peer feedback	No structured peer evaluation/feedback.	Structured peer evaluations/feedback.
Problems	Reasoning around problems with no specified questions.	Reasoning around problems with associated questions.

From Table 2.3 and Table 2.4, it has been demonstrated that it is neither needed nor highly desirable to make a choice between PBL and TBL. It is maybe more profitable to optimize trainees learning if we look for ways to combine the best of both methods: PBL with structured feedback, PBL with teams studying together, TBL with group discussions before reading assignment, or TBL with students generating their own learning problematics and interests.

In sum, the idea is here to think about a “win-win” situation when the curricula is to be designed, in order to optimize trainees learnings and use varied approaches that could fit with current design principles.

Within DRIVER+, the SIA trainings will only count one trainer per session. The trainees will be divided in small teams in a large room and will have an exercise to be prepared at each table. The trainer will go from group to group to deliver a common message. As already mentioned, the trainees will receive all available supporting documents to get easily into the content: the SIA trainings framework, the PowerPoint presentation (Annex 2.4) and the booklet for trainees (Annex 2). The content of the training will be considered as a new subject for the trainees and presented to them before the discussion that the team will have. As professionals of the security sector, trainees will also be asked to activate their prior knowledge of the security field in general to get to grips with the subject, without being tested first.

The trainer will define content for pre-class study based on knowledge required for application problems and will send the questionnaire (Annex 2.5) to the trainees beforehand. The trainees will be then in charge of defining what is not yet well understood after an initial group discussion of a professionally relevant problem.

Both confirmatory and corrective feedback about the SIA training will be required by the trainer. The trainees will therefore be asked to fill the questionnaire (Annex 2.5) at the end of the sessions. The main aim of the questionnaire is to take the expressed feedback into account to improve future sessions.

3. The SIA training components

The training components are developed to present the SIA framework and to explain the approach for conducting SIAs. They translate the SIA framework [2] and the SIA [1] into training components, which make up the structure of the training sessions. This provides solution providers, practitioner organisations/end-users and researchers, with a concrete method for fostering positive societal impact (e.g. resilience) by considering key societal values and principles in their work.

The components are complemented with explanatory training material, like a training booklet (Annex 2), a PowerPoint presentation with illustrative examples, questionnaires meant to enhance discussions between the trainees and between the trainees and the trainers, and a last questionnaire to collect feedback from the trainees. The latter is considered as crucial for the future trainings to be conducted and for the development of the final set of SIA training modules to be delivered by the end of the project.

The components are developed in an easy-to-read shape and language, both for the trainer and for the trainee. The trainees will be introduced to the content of the SIA trainings mainly through the specific PowerPoint presentation (Annex 2.4) that is accompanying each component, and through the SIA booklet (Annex 2) that will be handed out before and at the training sessions. The trainers will use this deliverable and the explanatory step-by-step guide (Annex 3) to prepare and carry out the sessions in the most useful way.

3.1 Three consecutive components

A typical working session consists of the following structure of components:

- Societal Impact Assessment (SIA): A crucial concept for CM.
- Societal Impact Assessment (SIA): Presentation of the method.
- Societal Impact Assessment (SIA): Implementation of a method.

Component 1 – Societal Impact Assessment (SIA): A crucial concept for functions of CM solutions.

The first component serves as an introduction, and is obligatory for all who take part in training sessions. As already stated, it is crucial that the trainees understand the importance of societal acceptance. Component 1 emphasises this aspect and illustrates the unintended effects that security and CM solutions may have on society. In line with the methodology outlined above, it does so by drawing on concrete examples and cases which are relevant to the key themes in DRIVER+, e.g. cross-border tasking and resource management, high level coordination, involvement of volunteers and emergency supply to population. These cases and examples are important to bring the urgency of the societal dimension as close to the trainees as possible. Furthermore, these are also the points targeted through the trials.

Component 2 – Societal Impact Assessment (SIA): Presentation of the method.

The second component gives a detailed introduction into the SIA framework's components. This means that after identifying the importance of societal impact assessments for CM, the trainees learn about a step-by-step method to conduct such assessments. The step-by-step method can be divided into three main parts (see Figure 3.1).

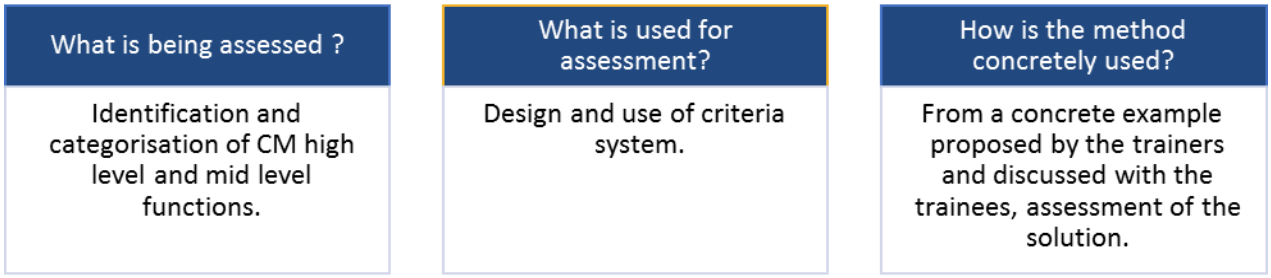

Figure 3.1: The step-by-step method

In order to conduct the training based on this theoretical knowledge right away, the trainees actively discuss those individualized example assessments, which are the most relevant to their field.

Components 3 – Societal Impact Assessment (SIA): Implementation of a method.

Finally, the trainees conduct assessments by themselves based on the functions of the specific CM solutions that they are working with. Every component is supported by training material to illustrate and summarize the most important points and give room to conduct one's own assessments.

3.2 Main lessons learnt from the trainings carried out so far

The first SIA trainings were carried out by EOS in summer 2016, in The Hague with the project partners in the former SP5. The framework itself has been proven to be complex and lengthy, but its practical explanation during the trainings has been perceived as a good alternative. Trainees were encouraged to read through the societal impact framework before the training in order to get into the content, although some trainees admitted not having done this in advance. Preparing for the sessions as described above also helps trainees to better explain to other partners and their colleagues the benefits of a societal impact assessment prior to implementing an idea or solution. The self-assessment gives them the trigger to learn more about the potential harm but also benefits of solutions.

In addition to this, trainees appreciated the recommendations (as delivered via [1]) drafted for their benefit. It is crucial that the SIA topics discussed in the trainings have visible effects to society in order to attribute clear impact to the functions of CM solutions, and thus the trainings should aim to use examples demonstrating this. This of course may be difficult to visualise in cases where for example privacy and data protection are involved. From experience however, any concrete and tangible result is more welcome than a general assumption on what could be the impact. Also for this reason the booklet (Annex 2) handed over to trainees in advance of the training session and on the day itself, consists of a detailed description of these terms. Understanding the meaning of the key concepts and terms is thus considered a first crucial step.

A very welcomed mechanism has been the use of the functions of CM solutions they were experimenting with, when adapted to a different case study. This especially when combined with showing effects and impacts of functions of that specific CM solution on a real-life case, as well as under which circumstances it was perceived to have failed to take societal impact under consideration. These examples provoked discussions among trainees. This also facilitated a fruitful exchange between trainer and the trainees, which is of added value to both sides (future trainings for the trainers and use of the framework for future functions of CM solutions for the trainees).

While TBL provides useful information on how to run an educational workshop, there is one aspect that prevents the direct application to the SIA training in DRIVER+. Unlike in an academic setting, in advance there is obviously no grading for their participation in the workshops.

Underlining the relevance of the SIA trainings is key to its successful implementation, especially as the partners expectedly have limited time and resources to do so. As a result, the SIA components and the final set of sustainable SIA training modules need to highlight the importance of incorporating SIA into solution development right from the start. In practical terms, the SIA components provide preparatory material to trainees before the session, but then also spend time within the component to further explain the utility of SIA. Once trainees have been made aware of exactly why it could be useful to their work, the training session will move on into explaining, in practical terms, how to do a SIA. This activity could then follow the PBL approach by utilising group work and active participation.

3.3 Preparation by the trainees

The target audience of this current deliverable are the trainers. Both the actual training components, the PowerPoint presentation (Annex 3.6) and all the documents related to them (D840.11 [2], this D913.51 document, the training booklet (Annex 2) and the step-by-step trainer guide (Annex 3) are written in a way

that guides the trainer through the material in an easy step-by-step way. Each slide of the PowerPoint presentation (Annex 3.6) that accompanies the training components contains instructions to the trainers.

The PowerPoint text (Annex 3.6) can be read out or edited according to the trainer's competences and wishes. Each part of the training session starts with an overview of the time needed for the part, the method used and the teaching material that will be used in the respective session. The length of the sessions can be adjusted to the needs of the trainees, and to the time slots available.

Usually, a session takes three hours but the length of the sessions can be tailored to each group of trainees. It should also be clarified that each component is not taught to everyone overall but will target the related partners/solutions providers involved in the related trials.

In preparation of the training sessions, the trainers should:

- Send relevant sections or summaries of key parts of [1] and [2] to the trainees and encourage them to familiarize with them.
- Have copies of [1] and [2] available.
- Have one copy of the SIA training booklet (Annex 2) per participant ready.
- Follow and respect the trainer's step-by-step trainer guide (Annex 3).
- Familiarize themselves with the trainees, and choose and prepare those components that are most relevant to the audience.
- Organize and bring the rest of the teaching material specific to the audience.
- Clarify with the meeting leader how much time they have available for the SIA training session.

In preparation of the training sessions, the trainees should:

- Be familiarized with the [1] and [2].
  - Within [1] the most important sections are section 2 (very short), section 3, 4, or 5, depending on their interest.
  - Within [2] the most important sections are section 2 and section 4.
- Have read the SIA training booklet (Annex 2).
- Be present on time.
- Show interest during the sessions to make them interactive.

4. Conclusions and way ahead

This deliverable provides concrete concepts and material to be used for training sessions. The overview of training components (in Annexes) combines the theoretical background for training as well as the objectives of the training sessions and translates these into a strategy for training and learning about SIA. The training components are designed to accomplish the following specific learning targets, learning results and outputs:

- An understanding of the importance of SIA in CM.
- Concrete examples of societal impacts in DRIVER+ - relevant domains.
- Raised attention to the challenges of determining societal impacts.
- An understanding of what SIA can and cannot deliver.
- An understanding of the SIA framework's method.
- An overview of functions of solutions and the rationale of their setup.
- An overview of assessment criteria and the rationale of their selection.
- The familiarity with the elements of a societal impact assessment.
- An understanding of how to consult the key deliverables, D840.11 (framework version 1) [2] and D840.21 [1].
- An understanding what cross-solutions providers' collaboration for SIA entails.
- Knowledge on how to identify more functions of solutions than before this training.
- A better understanding of the impact of their work on society in terms of what they are designing and developing (this applied not only within DRIVER+).
- An understanding of the SIA, of example assessments provided in D840.21 [1].
- The capacity to conduct assessments while designing and developing solutions on crisis management.

The main outputs of this deliverable are the training components, which not only combine contents with training methodology, but also include concrete examples, illustrations, presentations and work sheets, i.e. material that is used to organize training sessions. The material is designed in a way that allows for an adaptation to the training audience, depending on whether training sessions are held with consortium partners with various backgrounds or with specific solution providers. Part of this training material is the training booklet (Annex 2) that can be reproduced and handed out to every participant in order to provide them with a take-away of the key contents. Finally, a training calendar (Annex 3.2), also present online in the DRIVER+ Collaborative Workspace (CoW), can be used as a starting point to schedule training sessions for the various consortium partners.

The training sessions will take place throughout 2018. Practicalities and organization of the sessions are part of task 913.5 of DRIVER+. After the training sessions have ended, the insights on both the training method and the content will be collected. This will be used to update the version of the SIA framework and the SIA training components (forthcoming D913.52 "Training Modules for Societal Impact Assessment" of DRIVER+).

Finally, these components will be revised and resubmitted in new deliverables towards the end of the project; versions which will be revised so that they can be used also outside the DRIVER+ consortium and for CM in general. The SIA will also be brought in to DRIVER+ SP95 work on sustainability and standardisation.

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Annexes

Annex 1 – DRIVER+ Terminology

In order to have a common understanding within the DRIVER+ project and beyond and to ensure the use of a common language in all project deliverables and communications, a terminology is developed by making reference to main sources, such as ISO standards and UNISDR. This terminology is presented online as part of the Portfolio of Solutions and it will be continuously reviewed and updated[9]. The terminology is applied throughout the documents produced by DRIVER+. Each deliverable includes an Annex as provided hereunder, which holds an extract from the comprehensive terminology containing the relevant DRIVER+ terms for this respective document.

Table A1: DRIVER+ Terminology

Terminology	Definition	Source
Civil society	The process by which people, organisations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.	
Competence	Demonstrated ability to apply knowledge and skills to achieve intended results	
Research ethics	The ethics of the planning, conduct, and reporting of research; this pertains in particular to rules and guidelines for the participation and protection of individuals taking part in the research activities	
Risk Analysis	Process to comprehend the nature of risk and to determine the level of risk.	
Skill	Ability to perform a task or activity with a specific intended outcome acquired through education, training, experience or other means	
Societal impact	Dimension of crisis management that refers to its unintended positive or negative impacts on different societal groups or society as a whole, as well as on its core values and societal principles as captured for example in fundamental rights, constitutional laws, but also in public debate.	
Societal Impact Assessment	The process of identifying, analysing and managing intended and unintended (positive or negative) societal consequences.	
Societal resilience	Social entities and their abilities to tolerate, absorb, cope with and adjust to environmental and social threats of various kinds.	
System function	Broad category of activity performed by a system	
Training	Activities designed to facilitate the learning and development of knowledge, skills, and abilities, and to improve the performance of specific tasks or roles	

[9] Until the Portfolio of Solutions is operational, the terminology is presented in the DRIVER+ Project Handbook and access can be requested by third parties by contacting coordination@projectdriver.eu.

Annex 2 – Training booklet to be used by the trainees

The training booklet consists of four elements which will all be shared to the trainees:

- An invitation letter to trainees (Annex 2.1).
- The SIA framework, as part of D840.11. (Annex 2.2 and Annex 2.3).
- A PPT presentation further introducing the training session (Annex 2.4)
- A questoinnaire to collect feedback (Annex 2.5).

The whole training booklet is available on the internal DRIVER+ Collaborative Workspace, and on the public DRIVER+ website: http://www.driver-project.eu/.

Annex 2.1 – Invitation letter to trainees

Dear Partners,

You are about to experience the SIA trainings! Congratulations!

Before starting the sessions, please carefully consider the documents making-up the booklet:

- The SIA framework, as part of D840.11.
- The PPT presentation, which will be the support of the sessions.
- The questionnaires that we will ask you to fill at the end of the training.

You have received the booklet, two weeks before your session. Should you have further concerns, remarks or questions, please do not hesitate to contact Elodie Reuge : Elodie.reuge@eos-eu.com. She will reply to you as soon as possible and before your session.

We wish you a very nice SIA training!!!

Annex 2.2– Societal impact assessment framework – version 1 – D840.11 (training booklet)

The report will be sent to the trainees as a complete document. Please find below some examples of the document the trainer will use.

D840.11 - Societal Impact Assessment Framework – Version 1

Document Identification	
Due Date	31/12/2015
Submission Date	01/09/2017
Status	Final
Version	4.0

Related SP / WP	SP8/ WP840	Document Reference	D840.11
Related Deliverable(s)	D92.11; D92.21; D92.12; D92.22; D93.21	Dissemination Level	PU
Lead Participant	PRIO	Lead Author	Stine Bergersen
Contributors	EOS	Reviewer	Marc Steen (TNO)

Keywords:
SIA framework, Societal Impact Assessment (SIA), positive, negative, methodology, method, criteria for societal impact

This document is issued within the frame and for the purpose of the *DRIVER* project. This project has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement No. 607798

1.4 Structure of the deliverable

The deliverable consists of five chapters:

1. General presentation of the DRIVER Societal Impact Assessment Framework
2. Societal Impact in crisis management: a systematic and comprehensive approach
3. The result: a detailed presentation of the DRIVER SIA framework
4. A practical guide to the DRIVER SIA framework
5. Conclusions & the way ahead: utilizing the SIA approach throughout the project and beyond

Annex 2.3 – Societal Impact Assessment framework (training booklet)

Please refer also to D840.11 "Societal Impact Assessment Framework - Version 1"

	SECONDARY IN/SECURITIES						Sustainability	POLITICAL AND ADMINISTRATIVE PRINCIPLES						LEGITIMACY		CORE SOCIETAL AND ETHICAL PRINCIPLES					LEGAL VALUES		FUNDAMENTAL RIGHTS				
Subcategory	Unease - Calmness	Suspicion - Trust	Misuse - Protection	New Vulnearbilities - Progress	Technology Dependency - Flexible Solutions	Function Creep - Specialised an	Sustainability	Accountability	Transparency	Integrity	Negative - Positive Standardization	International Relations	International Cooperation	State Citizenship Relationship	Political Reputation	Social Cohesion & Solidarity	Participation	Diversity	Open Control Society	Cultural and General Sensitivity	Suitability, Necessity & Proportionality	In/justice & In/equality	Dignity & Autonomy	Non-discrimination	Privacy & Data Protection	Freedoms & Protest	Measures as of WP/Tasks
FUNCTIONS CONCERNING CIVIL SOCIETY RESILIENCE																										
Category : Community Engagement																										
Training Communities for Psychosocial Support																										
Building & Measuring Community Resilience																										
Volunteer Management (Including Crowd Tasking																										
Category: Crisis Communication																										
From Crisis Management to Citizens (public)																										
Low-level: Media & Policy Communication																										
From the Citizens to Crisis Managers																										

FUNCTIONS CONCERNING STRENGTHENED RESPONDERS																									
Category: Identification & Awareness																									
Gap Analysis for Community Resilience																									
Situational Analysis & Impact Assessment																									
Early warning, Risk Analysis Forecasting																									
Identification of Critical Infrastructure																									
Category : CM Coordination, Command & Control																									
Tasking and resource management																									
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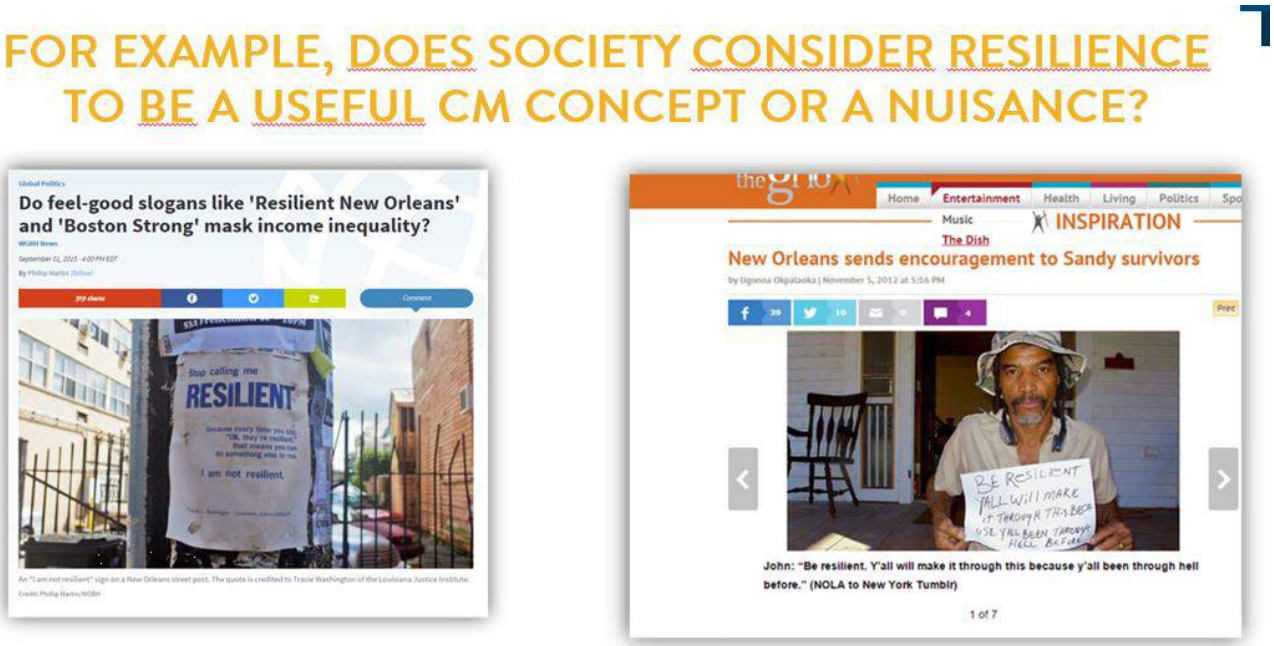
Strategic Transportation & Supply Chains																									
Category: Information Management																									
Collection & Storage of data																									
Low-level: Crowd Sourcing																									
Facilitating Data Processing (Including Operational Data lift)																									
Analysis & Evaluation																									
Communication between First Responders																									
FUNCTIONS CONCERNING LEARNING ACROSS BORDERS																									
Education & Training																									
Evaluation & Lessons learnt																									
Organisational adaptiveness																									

Annex 2.4 – PPT presentation (training booklet)

The presentation will be sent to the trainees as a complete document.

Please find below some examples of the document the trainer will use.



Annex 2.5 – Questionnaire about the trainings (training booklet)

Before leaving, we would kindly ask to answer the questionnaire and help us to improve the next sessions!

1) Was this session relevant to you? Please explain why.
2) Did you achieve the expected output?
3) What are the main difficulties for you in term of self-assessment?
4) Do you think that the SIA trainings helped you to address those challenges?
5) From your point of view were the examples chosen relevant for your sessions?
6) From you point of view, how can we make the SIA more relevant for end-users?
7) Do you consider the SIA trainings method as “end-users friendly”?
8) Would you use the SIA methods before developing / Implementing / choosing a solution?

Please develop your replies below:

1)
2)
3)
4)
5)
6)
7)
8)

Annex 3 – Step-by-step guide for trainers

The trainer guide consists of five elements which will all be shared to the trainers:

- An invitation letter to trainers (Annex 3.1).
- The SIA trainings calendar (Annex 3.2).
- This deliverable, D913.51 (Annex 3.3).
- The SIA framework, as part of D840.11. (Annex 3.4 and Annex 3.5).
- A PPT presentation further introducing the training session (Annex 3.6).

The whole trainer guide is available on the internal DRIVER+ Collaborative Workspace, and on the public DRIVER+ website: http://www.driver-project.eu/.

Annex 3.1 – Invitation letter to trainers

Dear Trainers,

You are about to give SIA trainings! Congratulations!

We would kindly give you the following advices before starting.

1st step:

Please use the SIA training calendar to organize your sessions. It will give the idea of the type of professionals attending the trainings.

2nd step:

Please read carefully D913.51 – Report on the Training Sessions for Societal Impact Assessments in the Consortium. The deliverable will give the main keys to implement the most relevant method for the SIA trainings.

3rd step:

Please carefully follow the documents making up the Guide:

- The SIA framework, as part of D840.11.
- The PPT presentation, which will be the support of the sessions.

These documents will be the basis of your training sessions. Kindly note, that the content of the PPT presentation contains an example that you are allowed to modify according to the needs/interests of your trainees. Please try to choose interesting examples, giving you the chance to interact with your trainees! Create the debate!

4th step:

You now have in your hands the keys for creative and successful training sessions. We would only have on last advice:

Create the debate! Don’t be afraid of taking “wrong directions”, it will be the most interesting part!

Annex 3.2 – SIA trainings calendar 2018 (trainer guide)

SIA TRAININGS CALENDAR

SP Leaders, WP Leaders : please indicate relevant meetings and trials dates

Once completed, please the updated version to Klaudia Tani : klaudia.tani@eos-eu.com and Elodie Reuge: elodie.reuge@eos-eu.com

FEBRUARY				
M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	21	23
26	27	28		

MARCH				
M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

APRIL				
M	T	W	T	F
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30				

MAI				
M	T	W	T	F
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

JUNE				
M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

JULY				
M	T	W	T	F
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9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	31			

AUGUST				
M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	

SEPTEMBER				
M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28

OCTOBER				
M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30	31		

NOVEMBER				
M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

DECEMBER				
M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28
29	30	31		

Annex 3.3 – Report on the Training Sessions for SIAs in the Consortium – D913.51 (trainer guide)

The deliverable will be sent to the trainers as a complete document. Please find below some examples of the document the trainer will use.

driver+
Driving Innovation in Crisis Management for European Resilience

D913.51 – REPORT ON THE TRAINING SESSIONS FOR SOCIETAL IMPACT ASSESSMENTS IN THE CONSORTIUM

SP91 - PROJECT MANAGEMENT

JANUARY 2018 (M45)

This project has received funding from the European Union's 7th Framework Programme for Research, Technological Development and Demonstration under Grant Agreement (GA) N° 607798

1.2 Trainings as a prerequisite for successfully conducting SIA

The SIA concept is designed to integrate societal impact assessments into the project. The practical understanding and implementation of this concept happens mainly via the organisation of the training components to be put in place, as will be described in the following section and is illustrated in Figure 1.1.

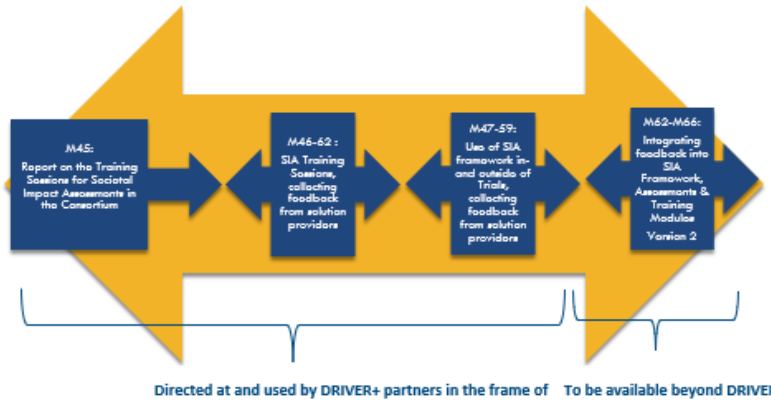

Figure 1.1 The SIA Approach in DRIVER+

Given that this deliverable presents the first version of the SIA Training Components, the annexes are to be understood as a "prototype" version to be improved throughout the project via the dissemination of the sessions, and following the reports produced by the trainer after each session which takes the trainees' feedback into account. These components are based on the SIA framework version 1 presented in D840.11 and on the first set of societal impact assessments (by using the SIA framework) presented in D840.21.

The *Training sessions* are divided into several parts called *Training Components*. Here, the trainees are introduced to a concrete method for implementing SIA in their work and environment. They also learn how to conduct SIAs themselves, though team exercises during the trainings.

To ensure that the insights gained during training sessions and trials are systematically collected and utilized, a questionnaire will be distributed at the end of each session. This questionnaire is also integrated into the training material. At the end of the training sessions, a short report will summarize whether the learning objectives have been met, taking into consideration the feedback on the components and the results of the questionnaire. This information constitutes the basis for reflecting on how to improve the learning process before a new session takes place.

The design and implementation of the SIA components serve as a vantage point for innovation in CM. They provide a methodology, a set of assessments and relevant training material for practically implementing SIA into CM. Since the final SIA training modules will be available in open access through the DRIVER+ website, they will be ready for implementation in future CM projects. The ultimate goal is to contribute to making SIA a standard procedure in CM at large, by making the DRIVER+ approach a basic reference model for SIA in European CM.

Annex 3.4 – Societal impact assessment framework – version 1 – D840.11 (trainer guide)

The report will be sent to the trainees as a complete document. Please find below some examples of the document the trainer will use.

D840.11 - Societal Impact Assessment Framework – Version 1

Document Identification	
Due Date	31/12/2015
Submission Date	01/09/2017
Status	Final
Version	4.0

Related SP / WP	SP8/ WP840	Document Reference	D840.11
Related Deliverable(s)	D92.11; D92.21; D92.12; D92.22; D93.21	Dissemination Level	PU
Lead Participant	PRIO	Lead Author	Stine Bergersen
Contributors	EOS	Reviewer	Marc Steen (TNO)

Keywords:
SIA framework, Societal Impact Assessment (SIA), positive, negative, methodology, method, criteria for societal impact

This document is issued within the frame and for the purpose of the *DRIVER* project. This project has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement No. 607798

1.4 Structure of the deliverable

The deliverable consists of five chapters:

1. General presentation of the DRIVER Societal Impact Assessment Framework
2. Societal Impact in crisis management: a systematic and comprehensive approach
3. The result: a detailed presentation of the DRIVER SIA framework
4. A practical guide to the DRIVER SIA framework
5. Conclusions & the way ahead: utilizing the SIA approach throughout the project and beyond

Annex 3.5 – Societal impact assessment framework (trainer guide)

	SECONDARY IN/SECURITIES						Sustainability	POLITICAL AND ADMINISTRATIVE PRINCIPLES						LEGITIMACY		CORE SOCIETAL AND ETHICAL PRINCIPLES					LEGAL VALUES		FUNDAMENTAL RIGHTS				
Subcategory	Unease - Calmness	Suspicion - Trust	Misuse - Protection	New Vulnearbilities - Progress	Technology Dependency - Flexible Solutions	Function Creep - Specialised an	Sustainability	Accountability	Transparency	Integrity	Negative - Positive Standardization	International Relations	International Cooperation	State Citizenship Relationship	Political Reputation	Social Cohesion & Solidarity	Participation	Diversity	Open Control Society	Cultural and General Sensitivity	Suitability, Necessity & Proportionality	In/justice & In/equality	Dignity & Autonomy	Non-discrimination	Privacy & Data Protection	Freedoms & Protest	Measures as of WP/Tasks
FUNCTIONS CONCERNING CIVIL SOCIETY RESILIENCE																											
Category : Community Engagement																											
Training Communities for Psychosocial Support																											
Building & Measuring Community Resilience																											
Volunteer Management (Including Crowd Tasking																											
Category: Crisis Communication																											
From Crisis Management to Citizens (public)																											
Low-level Media & Policy Communication																											
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FUNCTIONS CONCERNING LEARNING ACROSS BORDERS																											
Education & Training																											
Evaluation & Lessons learnt																											
Organisational adaptiveness																											

Annex 3.6 – PPT presentation (trainer guide)

The presentation will be sent to the trainees as a complete document.

Please find below some examples of the document the trainer will use.