D953.11 – ENHANCING THE SHARED UNDERSTANDING OF CRISIS MANAGEMENT – PROGRESS REPORT 1
SP95 - IMPACT, ENGAGEMENT AND SUSTAINABILITY

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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 organise 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

The overarching objective of the DRIVER+ project is to improve the way capability development and innovation management are tackled, by testing and validating (in realistic environments) solutions that are addressing the operational needs of practitioners dealing with Crisis Management (CM). However, CM is an intricate and multi-layered field, involving many different organisations and disciplines throughout its cycle (mitigation, preparedness, response, recovery). With newly arising, cross-border security threats in Crisis Management (natural disasters, terrorist threats, pandemics, migration, etc.), Europe is in need of a convergence of resources, but also of equipment and knowledge, to better manage those ever-changing risks and threats. Market fragmentation, lack of common certification, as well as common standards in the field, adds to the challenges practitioners are facing. To overcome these limitations, and therefore to reach a shared understanding in Crisis Management across Europe, there is a clear necessity for the creation of a united ecosystem in Crisis Management, the establishment of common practices, the access to similar information and the set-up of mechanisms for exchanges on lessons learnt.

Currently, no overarching strategy yet exists to involve all these stakeholders to discuss crisis management challenges at a macro level, i.e. at all phases of the crisis management cycle, which could play a role in facilitating the implementation of policy and the uptake of research and innovation by practitioners and other end users. While the European Union Civil Protection Mechanism (EUCPM) (1) and the European Forum for Disaster Risk Reduction (EFDRR) (2) are helping Member States to better align their national policies in line with the Sendai framework (3), there is a need to complement this by offering practitioners and end-user a collaborative space in which innovative solutions and best practice tool kits for cross-national and multi-faced risk scenarios can be discussed and enhanced.

For the reasons stated above, and in spite of its limited timeframe, the project ambition with regards to stakeholders engagement and the emergence of a shared understanding is first and foremost a long-term one: to build and engage with an active and structured Community of Practice in the field of Crisis Management that will be sustainable after the end of the project duration: the Crisis Management Innovation Network Europe (CMINE). The engagement of policy makers, researchers, practitioners, industry representatives, and citizens in crisis management innovation is a key to reduce fragmentation, create a shared understanding, and find better solutions smarter and faster. Therefore, the CMINE, supported by the Online Community Platform and in-person gatherings, will constitute a crucial element of the DRIVER+ project by acting as an overarching body that will link and connect stakeholders dealing with Crisis Management and allow them to exchange on challenges at all levels of the crisis management cycle (preparedness, response, recovery, resilience). This will facilitate the implementation of policies and the uptake of research and innovation by practitioners and other end-users.

Being the first iteration of a series of reports, the present document specifically focuses on detailing the concept and approach behind the creation of the CMINE and setting the initial set of requirements laying down the foundations of its implementation within the context of DRIVER+, but also, its continuation beyond the project duration. While this initial document provides the overall conceptual framework necessary to conduct the work under WP953, it also intends to give details on the initial progress made with regards to the organisation of the third edition of the Innovation for Crisis Management (I4CM) events, the first edition of the Policy-Research Dialogue Roundtable and the current developments of the Community Management Tool. The next iterations of this living document (D953.12, D953.13) will aim at providing updated versions of these requirements, based on feedback and outcomes of the activities to be carried out. Further details on the concrete implementation of the related tasks will also be provided. The last iteration (D953.14) will include the final version of the strategy and implementation plan for developing the CMINE, providing also concrete options on how to maintain this Community of Practice (CoP) after the end of the project duration.

Finally, it has to be noted that this deliverable should serve as the main framework for the WP953 partners, and more generally, the DRIVER+ consortium, with regards to the development and implementation of all the activities supporting the CMINE (i.e. Policy-Research Dialogue Roundtables, Innovation for Crisis Management events, liaison activities, Community Management Tool, annual reports).

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List of Acronyms

Acronym	Definition
AASHTO	American Association of State Highway and Transportation Officials
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosive
CM	Crisis Management
CMINE	Crisis Management Innovation Network Europe
CMT	Community Management Tool
CoE	Centre of Excellence
CoP	Community of Practice
CoU	Community of Users
D&C	Dissemination & Communication
DG	Directorate General
DoW	Description of Work
DRMKC	Disaster Risk Management Knowledge Centre
EC	European Commission
ECM	External Cooperation Manager
ERCC	Emergency Response Coordination Centre
EU	European Union
EUCPM	European Union Civil Protection Mechanism
EFDRR	European Forum for Disaster Risk Reduction
I4CM	Innovation for Crisis Management
IPR	Intellectual Property Rights
KoM	Kick-off Meeting
MS	Member State
OCP	Online Community Platform
PCT	Project Coordination Team
PMB	Project Management Board
PoC	Point of Contact
PoS	Portfolio of Solutions
RAN	Radicalization Awareness Network
SP	Subproject
SPCC	Subproject Coordination Committee
ToR	Terms of Reference
UNISDR	United Nations International Strategy for Disaster Reduction

Acronym	Definition
WP	Work package

1. Introduction

1.1 Background and objectives for engaging with the Crisis Management Ecosystem

The engagement with the CM ecosystem is of utmost importance for DRIVER+ to jointly progress in the critical areas of CM and to create acceptance for new solutions and approaches towards the successful introduction of innovation. In particular, the systematic participation of the DRIVER+ stakeholders in the project activities will help the DRIVER+ consortium to align with and to follow-up on relevant policies, challenges, gaps and community needs faced within the wide spectrum of thematic areas dealing with CM. To increase the relevance of the results, and ensure that the DRIVER+ Trials are conducted taking into account the technological state-of-the-art and relevant knowledge available outside of the consortium, the DRIVER+ Trials, final demonstration and events will therefore follow an inclusive approach. The DRIVER+ specific objectives for engaging with the Crisis Management ecosystem are the following:

- **Extend the knowledge base**: Involving new network partners and practitioner organisations will allow the project to gain access to new knowledge and expertise, in particular with respect to operational and management challenges, specific technological requirements, challenges related to regulations and standardisation, or challenges related to the evaluation processes; moreover, sharing of best practices and lessons learnt will allow to learn about new and innovative solutions supporting their operations.
- **Ensure the appropriateness of the project activities**: Enabling the participation of external innovative solution providers, concerned practitioners and relevant experts to the DRIVER+ Trials and the final demonstration should ensure their high quality, relevance and appropriateness.
- **Enhance the cooperation framework:** Developing synergies with related initiatives and projects at international, and at local levels should increase the outreach and multiply the impact of the project, therefore enhancing the transfer of knowledge and research's outputs to the practitioner networks.
- **Enhance the data flow to the Portfolio of Solutions (PoS):** Achieving a fluid communication with solution providers should ease and increase the introduction of third party solutions already used by practitioners or relevant to Crisis Management in the Portfolio of Solutions and therefore extend the technological state of the art.
- **Get support and attract potential users**: Involving stakeholders properly to assure they can act as advocates of the project, multiplying the outreach and ultimately improving the possibilities of obtaining endorsement and therefore, finding appropriate options for securing the sustainability of the project results i.e., the Test-bed, the Portfolio of Solution and the CMINE).

However, beyond the project itself, it is to be highlighted that there is no current existing overarching strategy to involve all these stakeholders to discuss Crisis Management challenges at a macro level, i.e. at all phases of the crisis management cycle, which could play a role in facilitating the implementation of policy and the uptake of research and innovation by practitioners and other end users. While the European Union Civil Protection Mechanism (EUCPM) (1) and the European Forum for Disaster Risk Reduction (EFDRR) (2) are helping Member States to better align their national policies in line with the Sendai framework (3), there is a need to complement this by offering practitioners and end-user an in-person and online platform where innovative solutions and best practice tool kits for cross-national and multi-faced risk scenarios can be discussed and enhanced.

Given the above mentioned gap, and in spite of its limited timeframe, the project ambition with regards to stakeholders engagement and the emergence of a shared understanding is first and foremost a long-term one: to build and engage with an active and structured Community of Practice in the field of Crisis Management that will be sustainable after the end of the project duration: the Crisis Management Innovation Network Europe (CMINE).

1.2   WP953 – Enhancing the shared understanding of CM rationale

WP953 - Enhancing the shared understanding of Crisis Management (CM), led by ARTTIC, is a specific building block of DRIVER+ which aims at supporting the realisation of the third main objective of the project (i.e. to foster a shared understanding in CM), and at setting the basis for the creation of a European CM culture necessary to ensure (i) the adoption and uptake of the project's results; and (ii) ultimately enhance the European CM capabilities. Building on the achievements of the past periods, this work package (WP) therefore seeks to enhance the cooperation framework and facilitate a shared understanding of CM across Europe, by fostering the existing CM community through the facilitation of exchanges between its members; the identification of best practices, but also by addressing issues of common interest, and discussing as well as contributing to a common research roadmap and programming.

This will be achieved by building a Community of Practice in Crisis Management (i.e. the **Crisis Management Innovation Network Europe**) closely aligned with the Community of Users (CoU) initiative run by DG HOME and complementing other already existing ones. Close liaison and engagement with relevant stakeholders as mapped in D952.11 – Dissemination and Communication Strategy and action plan (4) will be pursued in this regard.

The CMINE will be supported by a certain number of **tools, channels and forums** aiming at facilitating in-person and online exchanges and cooperation between the members of the community. In particular, based on the requirements for the establishment of the CMINE, WP953 will develop an **Online Community Platform**, support events organised for the CM community at the EU level (CoU), and organise in-person events aiming at (i) addressing the CM practitioners and stakeholders at regional level (i.e. the **Innovation for Crisis Management** (I4CM) events) and (ii) strengthening the Policy-Research Dialogue on research and demonstration activities in Crisis Management and increasing the EU added value of the DRIVER+ Trials. This will be achieved by organising **Policy-Research dialogue roundtables** involving policy-makers both, before the Trials and final demonstration to allow exchanges on the potential EU policies to be addressed and the involvement of DG HOME, DG ECHO /ERCC staff, and after the events to allow exchanges on the results and their potential policy implications. Finally, lessons learnt and project outcomes will be translated into **a dynamic and gradually strengthened reference document**, based on the views of an increasing community of practitioners and other stakeholders from various disciplines, to be released on the occasion of the 4th edition of the I4CM and the final conference.

1.3   Scope and structure of the document

The goal of this document is to detail the concept and overarching approach behind the creation of the CMINE and setting the initial set of requirements laying down the foundations of its implementation via the tools, channels and forums as detailed above, but also, its continuation beyond the project duration. Presenting the overall framework for the development of a Community of Practice in Crisis Management, this paper builds upon the conceptual outline of the CMINE as presented in D952.11- Dissemination and Communication Strategy and Action Plan (5) and sets the basis for the deployment of other WP953 planned activities. After an introductory section presenting the objectives, organisational structure and thematic scope of the CMINE (Section 2), light is first shed on some of the theoretical key principles in building a Community of Practice (CoP), introducing the work of Wenger E., a scholar particularly renowned in the field of CoP building (Section 3). In section 4, and building upon both the stakeholders analysis presented in D952.11 and desk research, the methodological approach used to identify the needs of the different stakeholders of the CMINE is presented. This is followed by section 5, presenting the preliminary CMINE framework starting with the envisaged overall structure and governance of the CMINE (section 5.1), before turning to the introduction of the online and in-person components of the community in sections 5.2 and 5.3, which lies at the heart of the CMINE. After this presentation, section 6 indicates how the CMINE will be (i) linked up with other DRIVER+ relevant sub-projects such as the Portfolio of Solutions and the Test-bed as well as with (ii) external initiatives as the Community of Users. As the CMINE aims to fulfil an umbrella

function, it is therefore crucial that the content and structure of the CMINE are aligned with other related initiatives in the field of Crisis Management.

About the messages the project will convey to these different stakeholders (section 4) and the means (tools and channels – section 5) DRIVER+ will use for the engagement and to relay the defined messages. Based on the previous sections, section 6 presents the DRIVER+ engagement roadmap, which provides a planning of the timely use of these means for engagement in different phases of the project lifetime. Section 7 informs the reader about the monitoring and evaluation mechanisms set up to ensure the appropriateness of the implemented actions. Through this control, any required re-orientation of the roadmap will be anticipated to ensure a maximised project impact at all times. Section 7 therefore provides a first outline on how the sustainability of the CMINE can be ensured and enhanced and identifies potential risks and mitigation measures. Finally section 8 presents the way forward, which provides a planning of the next steps towards the elaboration of the second iteration of the document.

This deliverable is intended to be a living document, which means it will be continuously updated and enriched throughout the DRIVER+ project duration, taking into account continuous feedback and developments within the project as well as those outside of DRIVER+. Therefore, this initial set of requirements is not set in stone but is expected to evolve over time, taking into account feedback received from an increasing community of practitioners and other stakeholders from various disciplines.

Three updates of this deliverable are foreseen:

- D953.12 – Enhancing the shared understanding of CM - Progress report – 2 (M52).
- D953.13 – Enhancing the shared understanding of CM - Progress report – 3 (M58).
- D953.14 – Enhancing the shared understanding of CM – Final report and way forward (M70).

These deliverables will reflect the activities and results achieved by the project and its contributing partners at the respective points of time and will inform the adjustments of the CMINE conceptualisation paper and strategy and its corresponding activities. This will align future actions with the dynamics of the actual project workflow and ensure the right measures are taken at the right time to maximise the project's impact and ensure the sustainability of the initiative described in this initial iteration of the document.

2.   Development of a Community of Practice in CM – The CMINE

The CMINE aims to address the fragmentation of the Crisis Management landscape. A plethora of projects and initiatives related to Crisis Management have been launched at national, EU and international level. However, coordination and oversight on these activities is scarce. Due to the lack of an overarching crisis management network both on European Union (EU) level and beyond, information and knowledge gaps are often occurring that restrain actors involved in Crisis Management to be as efficient and innovative as they should be. The fragmentation of the Crisis Management landscape also results in a slow uptake of market solutions and, thereby, the development of the domain is hindered.

To address these challenges, the DRIVER+ consortium is creating a Community of Practice in which the various types of stakeholders are encouraged to work together, to share knowledge and best practices that will eventually facilitate the faster market uptake of solutions in the Crisis Management domain. In particular, the Community of Practice aims at enhancing the application of research outcomes and the creation of solutions as this link is currently weak. The cornerstone of the Community of Practice is the **Crisis Management Innovation Network Europe** (CMINE). In light of the above, the goal of the CMINE is not to create yet another crisis management network or platform, but to serve as an overarching body that aims to connect existing networks and initiatives in order to better synchronise their work and increase efficiency.

The CMINE will be strategized and deployed through DRIVER+ which aims to (i) develop a Test-bed to improve Crisis Management capability development, (ii) create a Portfolio of Solutions of innovative Crisis Management solutions and (iii) enhance the cooperation framework and create a shared understanding of Crisis Management in Europe. Closely related to the third goal, the CMINE aims to draw connections between already existing networks and facilitate the exchange of knowledge and ideas among them. The underlying assumption of the CMINE is that the existing networks and stakeholder groups in the field of Crisis Management can benefit from better synergies and more advanced communication, which fosters sophisticated cooperation and a faster market uptake of existing and innovative solutions. To this end, the three main objectives of the CMINE are further defined in sections 2.1, 2.2 and 2.3. The DRIVER+ deliverable D952.11 – Dissemination and Communication Strategy and Action Plan (5) provides an elaborated overview of what gaps the CMINE attempts to address and what the exact rationale behind the development of the CMINE is.

This session intends to set the stage of the CMINE, introducing both the set of objectives that the CMINE intends to reach, but also its organisational structure and thematic as well as functional scope. The section concludes with a summary of the added value proposition and highlights its unique features in comparison with similar platforms in the crisis management domain.

2.1   Objectives

As outlined above, the CMINE is closely related to the third DRIVER+ objective, namely to enhance the cooperation framework and to create a shared understanding of Crisis Management in Europe. The objectives of the CMINE, therefore, tie in with this aim and will seek to:

1.   **Strengthen technical support and facilitate engagement within the Crisis Management landscape**

Many initiatives and projects have already been launched in the field of Crisis Management; however, coordination and cooperation between the various entities often remain limited. One of the main objectives behind the creation of the CMINE is therefore to reduce and eventually overcome this fragmentation by acting as an umbrella and connecting the actors in the Crisis Management field.

2.   **Address capability needs and opportunities for practitioners other professionals in Crisis Management**

The analysis of the Crisis Management domain shows that identifying challenges jointly is the first step towards solving them. To this end, the second aim of the CMINE initiative is to provide stakeholders with the fertile ground for new ideas, which enables them to work jointly on identifying needs, defining gaps and the sharing of lessons learnt related to the Crisis Management domain. The synergies that stem from the CMINE

offer stakeholders an excellent opportunity to discuss challenges in the Crisis Management domain on all levels and encourage them to come up with novel and innovative solutions.

3.   Improve market uptake of crisis management solutions

Closely connected with the first two objectives of the CMINE the third one focuses on enhancing the market uptake of solutions. For the time being, only a small number of solutions are transformed into actual services or products that can be used by Crisis Management practitioners. While the uptake of solutions in the security domain is better than elsewhere, it is still insufficient considering the investments made. By fostering the exchange of knowledge, insights, and best practices, the CMINE aims to reduce the gap in market uptake.

The CMINE aims to achieve these objectives by creating an overarching community around completed and ongoing projects and/or initiatives in the field of Crisis Management. Hereby, duplication is avoided and the texture of the Crisis Management domain is strengthened. Rather than repeating what has already been done and establishing yet another community, the CMINE will concentrate on fostering cooperation and synergies between those already-existing bodies.

2.2   CMINE organisational structure

The CMINE will be developed in-person (via working groups and events) as well as virtually via the Community Management Tool (CMT). Both instruments serve to reinforce one another to ensure that ongoing work maintains momentum and, wherever possible, best practices are brought to scale. The in-person aspect of the CMINE is at the core of the community and the in-person meetings serve as the building blocks. The CMT will provide the "cement" of the community, holding together the building blocks and allowing the members of the community to communicate beyond the face-to-face events.

The CMT is an online platform designed for supporting professional communities in research and innovation domains linked to projects in these fields. The CMT is designed and developed by ARTTIC and will constitute the technical backbone of the CMINE. The tool allows the CMINE members to meet online, interact and share information. The CMT is further elaborated upon in section 5.3.

2.3   Thematic scope and functional challenges

The scope of activities to be undertaken by the CMINE relates to the main thematic and functional topics identified by the United Nations (e.g. Sendai Framework) (3), the European Commission (e.g. Community of Users) (6) and UNISDR's PreventionWeb.net initiative (7). Furthermore, the DRIVER+ taxonomy (8) will be taken into account when identifying the most relevant themes and subthemes. The inputs from these sources will be used to compile a comprehensive list of themes that reflects the most relevant topics for the CMINE.

2.3.1   Thematic scope

The Table 2.1 provides an overview of the relevant themes and sub-themes for CMINE. The CMINE will take this as a basis for developing its work plans. The list is fairly long; therefore, a shortlist of trending themes will be developed. The overview below is not set in stone and throughout the development of the CMINE, the list of topics will be adjusted (also based on validation interviews with relevant stakeholders). The team is still researching which themes will be developed first; a decision on this matter is also partly dependent on the explorative interviews that will be held with various stakeholders in the upcoming months. This final selection of themes will be based, in particular, on urgency and stakeholder interests and needs.

Taking into account the current (parallel) development of an umbrella stakeholder network in the Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) field by two EU-funded research projects (ENCIRCLE and e-NOTICE), CMINE does not intend to cover CBRNE issues. However, links will be made with these networks to ensure optimal alignment on cross-cutting topics and potential synergy exploitation.

Table 2.1: Overview of themes and sub-themes

Theme	Subtheme
Disaster resilience	Resilient cities Resilient communities Risk reduction Prevention and mitigation Preparedness and response Recovery and reconstruction
Climate related hazards	Avalanche Cold wave/Heat wave Flooding Cyclone Drought Insect infestation Landslide Storm surge Tornado Tsunami Volcano Wild fire
Human-made disasters	Terrorism Armed conflict & civil unrest Chemical hazards Power service disruption & blackout Industrial accidents
Health threats	Pandemics Epidemics Radiation Air pollution
Critical Infrastructure Protection	Soft targets/urban CI Risk assessment and monitoring Border and Port Security Energy Security Food Supply Security Transportation Security
Multi-hazard	Response Risk reduction Communication

2.3.2 Functional challenges

In addition to the thematic areas, the following functional challenges defined by the Community of Users (CoU) initiative could also be explored:

- Civil protection / societal resilience:
    - o Training.
    - o Communication and engagement.
    - o Psycho-social support/stress management for the victims and response forces.
    - o Volunteerism.
    - o Urban resilience.
    - o Livelihoods.

- Horizontal issues:
    - o Communications.
    - o Critical Infrastructure resilience.
    - o Standardisation.
    - o Interoperability.

- Cooperation:
    - o Cross-border (EU internal/external) crisis risk governance.
    - o Civil-military cooperation.
    - o Transatlantic partnership.

- Tools:
    - o Early warning mechanisms.
    - o Technologies for responders.
    - o Protection Agenda.

- EU-related:
    - o External security of the EU.
    - o EU Crisis Management Legal and regulatory framework.
    - o Joint needs assessment and capability planning (based on the EU risk profile).

3. Theoretical approach for building a Community of Practice

The following section sheds light on some of the key theoretical principles relevant for building a Community of Practice (CoP) – starting point for the development of the CMINE. In particular, it introduces the work of Wenger. His work is widely perceived as the foundation of research on CoP in general and served as building blocks upon which much other research is based on. Wenger's pioneering contribution has been selected as the cornerstone in the development of the CMINE CoP.

Jean Lave and Etienne Wenger developed the concept of a Community of Practice (CoP) in the early nineties (9). They define a CoP as follows: "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly". Lave and Wenger argue that the three fundamental aspects of a CoP are domain, community and practice. The domain refers to the specific set of issues or topics that are central in the CoP and that attract the members of the community. Secondly, the community represents the group of people that unites around the domain. The levels of interest and participation differ per individual in the community and given the nature of the CoP, the community members themselves are able to decide upon their level of engagement. Lastly, practice refers to the way in which a certain CoP is structured. More specifically, it specifies which type of knowledge the community produces and shares.

The CMINE will be structured following the three fundamental aspects (domain, community and practice) outlined above. These fundamental building blocks will be coloured by additional relevant insights regarding both the theory and the practical building of the CoP.

3.1 Domain

Lave and Wenger underscore that a CoP is a living entity, able to grow along as the community matures. Farrior complements Lave and Wenger's ideas by noting that a CoP is never 'done'; it is continuously evolving and improving (10). Similar to Wenger, Farrior suggests that communities start small but can grow organically over time: "Once participants see the value of the CoP, they will return to it to nurture their relationships and their network". Wenger argues that CoPs should, therefore, be designed for evolution (11). CoPs are built upon pre-existing networks and, therefore, the design of the PoS should be concentrated on enhancing these networks. Rather than imposing a particular structure on the networks, the members should be encouraged to broaden the network naturally and, thereby, improve the continuity of the CoP.

Farrior emphasises that the purpose of the community should be clearly established. This goes hand in hand with consulting the potential members about their needs and priorities. She underscores that it is key to understand the audience and their core values. Furthermore, Wenger (11) notes that in order for the domain of the CoP to develop effectively, both an inside and an outside perspective are required. The insider perspective provides an insight in the issues that are at the heart of the CoP. This perspective understands the collective experience of the community members that is required to get the CoP off the ground. On the other hand, the outsider perspective aids one to understand and value the potential added value that the CoP can have.

Also, Wenger argues that while traditional communities often have a goal that is attempted to be achieved, CoPs function differently in that there does not necessarily have to be a goal as the exchanges amongst the members itself are of great value already. Therefore, a CoP does not have to define a clear goal at its start; instead, it should focus on strengthening the relationships between the members. It is crucial to understand that the value of a CoP does not necessarily lie within a specific outcome; rather, the processes within the CoP are most valuable.

3.2   Community

Wenger argues that stakeholders can participate on different levels in the CoP. The degree of interest and impact stakeholders have influences their willingness and interest in the CoP. However, the platform should allow stakeholders to move throughout the different levels of interest and, simultaneously, it should provide 'benches' for those who are not participating actively in the community to watch and observe the developments and get involved whether they feel like doing so.

Farrior notes that the CoP should be designed to accommodate the needs of the various types of members that will be engaged in the CoP. It should be structured to make new visitors feel at ease while members need to feel empowered and appreciated. This ties in with the next suggestion that Farrior makes; strong leadership is required. Leaders in the CoP are responsible for welcoming and guiding new visitors and members. They should be able to lead discussions and identify challenges that are faced by multiple actors.

3.3   Practice

At the core of a CoP are meetings where members gather to discuss issues, exchange ideas, etc. These events form the cornerstone of the CoP, according to Wenger (11). However, at the heart of the CoP are the relationships between the various members. While the meetings allow for group exchanges, a CoP should also reserve space for its members to interact individually. These bilateral exchanges constitute the cement of the CoP. Wegner emphasises that "Every phone call, e-mail exchange, or problem-solving conversation strengthens the relationships within the community".

A CoP should feel like a welcoming place where (after a while) it feels like one is familiar with fellow-members. Rather than at the workplace, giving or receiving advice in the CoP does not necessarily mean one becomes entangled in it. Members are free to help each other out without becoming too much involved. This sense of trust and familiarity defines the success of the CoP. It should be aligned to existing initiatives and meetings and provide thought-provoking discussions among experts that could or would not have taken place outside a CoP.

Also, Wenger notes that some sort of continuity is required in a successful CoP. There should be a balance between the type of meetings and events organised as well as their frequency. Active members should have sufficient opportunities to meet while actors that are more passive should not feel pressured or overwhelmed by the amount of activities organised. As Wenger describes: "The rhythm of the community is the strongest indicator of its aliveness" (12). This rhythm is different for every CoP and it can even differ throughout the stages of the CoPs development. However, in order to ensure the continuity of the CoP, the rhythm should be identified early and adjusted when needed.

Furthermore, a successful CoP makes use of etiquette (or 'netiquette') to allow for open discussions and to avoid conflicts. Another aspect highlighted by Farrior is the promotion of events and rituals; the organisation behind the CoP should host regular events but members should also be able to create their own. This strengthens the texture of the community, as outlined below by Wenger. Lastly, Farrior points out that member-run subgroups are a crucial element of a successful CoP. These subgroups would not only be a way to ensure members return, but also help to distinguish one CoP from all the others.

4. Methodology

This section reiterates the importance of stakeholder engagement and summarises some of the key take-always of D952.1 - Dissemination and Communication Strategy and Action Plan (4) with regard to identifying and classifying relevant stakeholders. It continues with the introduction of the methodological approach used to identifying the needs and wishes of the different stakeholders of the CMINE.

4.1 Stakeholder taxonomy: 3-tier approach

The CMINE will be established to serve a broad variety of stakeholders by facilitating knowledge exchange and synergy building. As highlighted in section 3, the stakeholders will vastly impact the course and direction of the CMINE as a Community of Practice and the CMINE thrives on the engagement and inputs of its members. Hence, since stakeholders play a crucial role for the success of the CoP, the identification process of relevant stakeholders, but also establishing their characteristics, interests and needs is indispensable to the development of an effective engagement process. The CMINE engagement strategy, including the rationale behind the prioritisation of the various stakeholders and related literature is further elaborated upon in D952.11 - Dissemination and Communication Strategy and Action Plan. The aforementioned deliverable also gives an overview of the process of identifying and categorising the various stakeholders that could be interested in the CMINE. It needs to be noted that the categorisation of stakeholders has slightly been modified from a 4-tier approach in D952.11 to a 3-tier approach in D953.11. Given the relevance and impact of the private sector for the objectives of the CMINE, the stakeholder group has been moved from the second tier to the first tier. The initial second tier thus has been removed since none of the stakeholders matched with the categorisation. Second-tier stakeholders were described as those, which could have a high impact for the project, but might not (yet) be interested in the project or even be unaware of its existence. In a nutshell, the stakeholder groups have been classified in three different priority groups, as described hereafter:

First tier key stakeholders: have the biggest impact and biggest interest in the project. The first tier key stakeholders are of critical importance for the success of the project.

Practitioners:

This is the most involved and influent group of stakeholders in CMINE, as the initiative is practitioner-needs driven. The interactions and inputs from this target group are especially critical to ensure the relevance and usefulness of project activities and results. It is possible to identify different types of individuals and organisations (including networks) that could belong to this group, whether they are partners of DRIVER+ or not. These include:

• Organisations: First responders (fire fighters, law enforcement, emergency services, etc.), civil protection units and civil society organisations / NGOs, and networks.

• Individuals (experts): those working as first responder, involved in the different phases of CM and from involved at different levels in the chain of command.

Scientific and Research community:

To enhance the scientific value of the project and to exchange good practices, tools, methods and interesting contacts within the research community it is crucial to reach out to this group of stakeholders. Two different sorts of stakeholders can be distinguished:

• Entities: In addition to universities and research centres, scientific work can be developed in other institutions; either public or private (i.e. think tanks, R&D departments of private companies, etc.).

• Individuals (experts): researchers with a focus on disaster risk and Crisis Management. It could also involve other professionals like engineers and technicians supporting the scientific and research activities, developing the technology, the infrastructure, the methodologies, etc.

Private sector:

As DRIVER+ seeks to improve the way capability development and innovation management are tackled, the private sector is an extremely relevant category of stakeholders, especially with regard to the development of the PoS and the provision of solutions.

Public bodies:

Are individuals (experts) or organisations who work in the public sector and who can make use of the DRIVER+ outputs for the achievement of their duties to serve the society. These can include policy makers, ministers, department directors, governance of Crisis Management centres, politicians, etc.

Related projects and initiatives:

An important category of stakeholders concerns EU projects and initiatives (past and present) involved in research, capacity building, training, and demonstration projects in the area of disaster risk and Crisis Management innovation. Their outputs and networks will be aligned with DRIVER+ activities to exploit potential overlapping or complementary synergies.

Second tier stakeholders: are individuals or organisations, which may have a limited impact, but might be interested in the developments and output of the DRIVER+ project (volunteer networks, specialised media)

> **Civil society:**
>
> Are individuals and entities belonging to the civil society, who can also have a genuine interest in the Crisis Management domain. Their capacities to take full advantage of the outputs of the project, however, differ considerably from those in the other groups, as they do not necessarily have enough expertise or knowledge to use them adequately. This category also encompasses the volunteer organisations and NGOs.

Third tier stakeholder: unlike stakeholders who have an interest in the outcome of the DRIVER+ project to at least some degree, actors such as the civil society at large as well as general media and research journalists might not be aware of the DRIVER+ project nor the CMINE. Therefore, their impact on the projects might be low.

Another critical factor for attracting and keeping members and therefore for the success of the CMINE is the continuous involvement and the development of tailor-made activities and products for its potential members.

4.2 Definition of engagement level

Based on the 3-tier approach presented above, the engagement level for the various stakeholder groups have been determined as follows:

- **Practitioners** are perceived to be the main group of beneficiaries of the CMINE outcomes. To this end, they will be a key stakeholder who will need to be engaged intensively and on a regular basis.
- The **Scientific and Research community** is also expected to both benefit greatly from the CMINE but also to contribute significantly to the community. Put bluntly, they are the knowledge creation community that links needs and gaps identified by practitioners into research questions and, ideally, solutions. Therefore, engagement should be foreseen throughout the project lifetime.
- **Public bodies** will, like industry, provide a facilitating role, insofar that they may help create an enabling environment (regulatory and otherwise) to ensure that new developments in the crisis management domain are recognised and supported.
- The **private sector** (industry players) is one of the target stakeholder groups of the DRIVER+ project. They will form a key facilitating role insofar that they are the linking pin between the development of a promising solution and a prototype that can be used by practitioners in the real world.
- **Civil society**, in turn, will be an important validating party insofar as they are the gatekeepers of the crisis management domain moving forward. They determine the "temperature" or sense of urgency of a given theme or topic.

While the identification and classification are key actions in the development of the CMINE, the subsequent step comprises an in-depth needs assessment of potential future CMINE users, which will enable the project team to synchronise the action and implementation plan with the actual ideas and wishes future CMINE users have in mind. The following section introduces the methodological toolset used to assessing the needs of the CMINE users.

4.3 Needs assessment CMINE users

The CMINE structure presented in the next section is the result of desk research and secondary literature analysis on both CoP building as well as the Crisis Management domain (as presented in Section 3 and D952.11). Based on this preliminary draft, the following task for the project team is to closely align and

synchronise the CMINE with the needs of its members. Therefore, the initial structure of the CMINE is subject to change overtime. The design as presented in this chapter functions only as the initial guiding framework for the CMINE. The following section introduces the methodological toolset used to assess the needs of the CMINE users in detail.

4.3.1   Scoping interviews: challenges and gaps identification

To receive a better understanding of the needs of the potential members of the CMINE, scoping interviews will be scheduled to identify the current challenges and gaps existing in the Crisis Management domain. The findings of the interviews will be complemented and cross-checked with the gap analysis and practitioner gap assessment workshop results DRIVER+ to be further documented in D922.11 – List of CM Gaps due in March 2018 (13). This combination of desk research and interviews will assist in providing a clear oversight of what is currently missing in the Crisis Management domain and how these gaps can be addressed more effectively.

4.3.2   Semi-structured Interviews with potential members

In order to get an adequate overview of the CMINE functionalities and features potential members would like to see incorporated, semi-structured interviews will be conducted with representatives of each of the stakeholder groups that will be included in the network. These explorative interviews are aimed at identifying what these potential members would want to gain from becoming a member of the CMINE.

The interviews will attempt to answer questions such as: 'Which features should the CMINE offer?', 'What would members want to gain from a membership' and 'How can the CMINE be of added value to your work?'. The answers to these questions should contribute to a better understanding of what a potential member of the CMINE would expect the community to offer him or her. Answering these questions is crucial to establish a CoP that meets the needs of the members and, thereby, is more likely to continue to exist after the DRIVER+ project ended.

In addition to the above, the interviewees will be asked about the most pressing challenges they see in the domain of Crisis Management. These insights will help one to formulate the challenges for every theme that will be presented on the CMT (see Section 5.3.2.1).

The insights provided by the interviewees will be critically reflected upon, including their feasibility and applicability. The input will also be taken into account when reassessing the structure and features of the CMT. However, the needs expressed by the interviewees might be impractical or even impossible to implement. For instance, interviewees might disagree on the frequency of in-person and/or virtual working meetings. They might also have a diverse perspective on what constitutes the 'most pressing challenges'. Conflicting opinion will nevertheless be taken into account. More specifically, areas where it is found that interviewees tend to disagree will be subject to further scrutiny as disagreement implies that the respective topic is particularly relevant and/or contentious.

Based on the stakeholder mapping exercise carried out in the initial stage of DRIVER+ (see D952.11) and the ongoing synergies identified since the restart of the project, the project team made a preliminary selection of possible interviewees that can be found below in

Table 4.1 hereafter. The shortlist includes two potential interview partners per stakeholder group, which have been selected on the basis of (i) professionalism and reputation; and (ii) their thought leadership and the presumed knowledge they have of the issues that are prominent among the other actors of the same nature. It needs to be stressed that the list below is preliminary and interview partners other related initiatives might be added or changed later on.

Table 4.1: Overview potential stakeholder interview partners

Stakeholder group	Potential interview partner	Contact person
Practitioner	EFRIM (European First Responder Innovation Managers)	Michiel Poppink
	IFAFRI (International Forum to Advance First Responder Innovation)	Phil Waters
	Willy Bruggeman, Chairman Federal Police Committee Belgium, Co-creator Europol	Willy Bruggeman
	Gaps Assessment workshop participants (13)	
Scientific and research community entity	Competence Center for Crisis Management (C³M)	Prof. Dr.-Ing. Bernd Hellingrath
	Societal Security Research Group	Arjen Boin, Co-Director
	Sanneke Kuipers, Associate Professor Crisis Management Leiden Univeristy	Sanneke Kuipers
Private sector	Inter System Interoperability for TETRA-TETRAPOL (ISITEP) Networks	Paolo Di Michele Project coordinator
Public bodies	United Nations International Strategy for Disaster Reduction (UNISDR)	Europe office
	Wil van Gemert, Deputy Executive Director of Europol, Operations Directorate	Wil van Gemert
Related projects and initiatives	PreventionWeb (UN Sendai Framework)	Craig Duncan Information Management Unit UN International Strategy for Disaster Reduction
	European Union Civil Protection Mechanism (EUCPM)	Johannes Luchner Director DG ECHO Crisis Management's Directorate
	SEC-GM01 practitioner networks	All project coordinators
	TIEMS	Harald Drager

Stakeholder group	Potential interview partner	Contact person
	DRMKC	Montserrat Marin Ferrer
Civil society	EU Red Cross	Flaminia Gallo Head of Unit Disaster Management

4.3.3 Semi-structured interviews with developers and hosts of different CoPs

Furthermore, talking to the developers and hosts of CoPs similar to the CMINE will allow valuable insights and strategies on how to create a successful and effective CoP. These CoP-building experts could provide one with tips on how to create a critical mass, how to design the governance structure of a CoP and provide insights on more practical matters.

The table below contains a list of portals have been pre-selected. Based on their structure, they can serve as best-practice examples. They were identified as strong examples as they were found to have succeeded in creating a strong member base (e.g. Polis) or they have been able to create a CoP including stakeholders of various categories (e.g. Center for Environmental Excellence by AASHTO). The Radicalisation Awareness Network (RAN) was identified as a good example as this community is structured around thematic working groups and, thereby, is likely to provide useful insights on how the CMINE could structure its community. Lastly, the CoU is regarded as the umbrella under which CMINE is grouped. Therefore, close liaison should be made with the initiators of the CoU when developing the CMINE as they are knowledgeable in establishing a CoP in a similar environment and as the CMINE intends to act as a support mechanism to the CoU.

Table 4.2: Overview best-practice platforms

CoP platform	Description	Contact person
European regions and cities networking for innovative transport solutions (Polis)	Polis is a network of European cities and regions cooperating for innovative transport solutions.	Karen Vancluysen Secretary General https://www.polisnetwork.eu/
Center for Environmental Excellence by AASHTO	The Center for Environmental Excellence by AASHTO (American Association of State Highway and Transportation Officials) CoPs provide forums for invited professionals to discuss and exchange information, experiences, ideas, and best practices on environmental topics related to the planning, design, construction, maintenance, and operation of highway and transit systems.	Melissa Savage Director https://environment.transportation.org/

CoP platform	Description	Contact person
Radicalization Awareness Network (RAN)	The Radicalisation Awareness Network (RAN) is an EU-wide umbrella network of practitioners and local actors involved in countering violent radicalisation. Guided by the RAN Centre of Excellence (CoE), working groups exchange experiences, knowledge and good practices.	RadarEurope Management of RAN CoE https://ec.europa.eu/home-affairs/what-we-do/networks/radicalisation_awareness_network/about-ran_en
Community of Users (CoU)	CoU addresses the fragmentation of the EU security field. It aims to ensure that (1) research programming takes account of practitioners' needs, (2) identifying the most promising tools and methods that have the potential to be taken up by practitioners, (3) support the competitiveness of EU industry by enhancing the market for research results, (4) ensuring that practitioners' expertise is available to policy makers, and (5) facilitating the implementation of policy.	Philippe Quevauviller

4.3.4 Refinement process

To attract new members, the project team will engage in outreach activities. As a first step, exploratory interviews will be conducted with potential members and/or other relevant stakeholders to further refine the proposed set-up, tools and other features of the CMINE platform (both online and in-person). This is the first major activity related to the process.

The development of CMINE will be a joint effort of all partners involved in WP953 – Enhancing the shared understanding of CM. Rather than having one partner conducting all interviews, the project team will make use of the existing networks of the DRIVER+ partners, carrying out the interviews on a network-to-network basis. The DRIVER+ partners constitute a mini-community themselves in the sense that they represent the different types of relevant stakeholders in the Crisis Management domain (researchers, practitioners, industry representatives, policy makers, civil society). This blend of partners is at the core of the DRIVER+ project and the vast body of knowledge and networks that come along with it will be used and exploited as far as possible.

Based on the expertise of the partners, an initial task division will be proposed. This division will be created based on the idea that partners familiar with a particular stakeholder type would be the most suited candidates to interview these stakeholders. As the partner is already familiar with the networks and trends

of the respective stakeholder, the interviews can go in-depth more easily and, thereby, more relevant insights could potentially be found. The figure below provides an initial overview of which partner would be most suited to conduct interviews with a particular stakeholder category. The next SP95 coordination report covering the period M47-53 (D951.16 – SP95 coordination report – 2 (14)) provides a more detailed overview of the envisaged division of tasks under WP953.1. The provided overview is not definitive and will be discussed with the respective partners before being finalized. The foreseen division of tasks deviates from the division presented in the DoW, however, due to evolving activities within the task this develop was inevitable. To ensure all partners are on the same page regarding their roles and responsibilities, the team will discuss the proposed division with each and every partner as well as it will host a meeting to elaborate upon the input that is expected from each partner.

In order to systemise the conduct of interviews, Ecorys will draft a questionnaire template, in close coordination with PRIO to ensure all ethical matters have been addressed, that partners can use as a guide when interviewing. This will help to structure the inputs received and to, eventually, create a (comparable) overview of what the potential members of the CMINE would expect of the community and which tools and features they would like to see represented.

The interviews will be structured in such a way (following the template) that the interviewer is able to focus specifically on the area of expertise of the interviewee. At the same time, enough flexibility will be provided for the interviewer to integrate sector specific knowledge into the conversation. For example, EOS (DRIVER+ partner) will most likely be tasked with outreach to the European industry community. They are best placed to address interviewees from the industry sector in terms of addressing possible incentives to join the CMINE. To this end, each DRIVER+ partner will have its own role to play in ensuring the different stakeholder groups understand the objectives and appreciate the added value of CMINE *from their perspective*. The interviews, then, serve to fine-tune and develop these initial ideas to ensure that specific needs and/or considerations can be taken on board.

Besides attempting to get a better understanding of what relevant stakeholders would like to gain from the CMINE, the interviews will also be used to create an oversight of what challenges are in a specific domain in Crisis Management. Furthermore, the interviews will be helpful to identify current trends and developments in the (specific themes within the) Crisis Management domain. Ultimately, an interview held by partner A with interviewee B representing practitioners could be aimed at (a) identifying the needs of the practitioners regarding a CoP, (b) creating an overview of which trends and developments are currently visible in the area of expertise of the practitioner (i.e. health threats) and (c) to get an understanding of which challenges the practitioner faces in general and in his/her area of expertise in general.

The partners are free to propose interviewees they deem most relevant and close collaboration with the External Cooperation Manager will be initiated to complement the list with already identified initiatives, practitioners, solution providers and experts who have expressed an interest in the project. The list of potential interviewees will be shared with Ecorys for final approval. Once the list of interviewees that will be reached out to has been approved, the partner can start scheduling the interviews. This method allows Ecorys to maintain oversight of which partner is interviewing which stakeholder (relating to which specific theme). As the quality of the interviews is valued deeply, there will be no minimum amount of interviews that each partner needs to carry out.However, each partner is expected to conduct enough interviews to get a thorough understanding of what a stakeholder type's needs are. Ecorys will, therefore, advice the partners on the amount and quality of the proposed interviewees when the proposed list of interview candidates is shared. ARTTIC will provide the bridge with related projects and initiatives and support the identification of practitioners, solution providers and experts.

Table 4.3: Needs assessment – Outreach per partner

Partner	Stakeholder group
TNO	Research Industry

Partner	Stakeholder group
DRC	Practitioner Civil Society
ECORYS	Industry Policy
ITTI	Private sector
PSCE	Practitioner Policy
DIN	Research
AIT	Research
DWR	Actors beyond EU level (local gov, UN, WB, NGO, volunteers)
EOS	Industry Research
SGSP	Practitioners
SRC PAS	Research Practitioners
VALABRE	Practitioners

4.4 Identification of themes

While further time will be dedicated to identify the themes relevant to the CMINE, an initial selection of has already been made (see section 2.3). However, as pointed out above, the selection of the themes is not set in stone and will be adjusted based on further research and interviews with potential members. During the three CoU meetings in 2018 interviews will be arranged with selected practitioners and other stakeholders. In addition, close attention will be paid to the issues and topics discussed during these meetings. The outcomes of these meetings will be taken into account when deciding upon the final list of overarching themes and challenges.

The shortlist of topics for the CMINE thematic working groups will be selected based on the taxonomy developed in DRIVER+ and the final selection will be aligned and/or cross-checked with the thematic areas covered by the Community of Users initiative, to ensure coherence of CMINE with the EC policy and programming priorities on the one hand, and ongoing activities on the other.

5. Introduction of the CMINE: an online *and* in-person community

The CMINE will meet regularly to discuss issues and exchange knowledge in the Crisis Management domain. These in-person meetings will be forming the backbone of the community. They will occur at regular intervals and provide a steady 'rhythm' or pacing between consideration and (inter-)action. The in-person aspect of the CMINE is complemented by the CMT that allows members of the CMINE to connect, interact and exchange online, at any point in time and from any desired location. This flexible online environment will serve as the glue that holds together the bricks of the community, the latter which represents the in-person meetings.

Both the in-person and the online aspect of the CMINE will be structured along a preselected set of themes (as elaborated upon in section 2.3). The three overarching thematic areas that will eventually be agreed upon, will serve as the three pillars of the CMINE. They will each be assigned a working group that is specifically dedicated to discussing challenges and exchanging knowledge pertaining to the respective theme.

The following chapter addresses the preliminary CMINE framework starting with the envisaged overall structure and governance of the CMINE (section 5.1), before turning to the introduction of the online and in-person components of the community in sections 5.2 and 5.3, which lies at the heart of the CMINE.

5.1 CMINE Roles and responsibilities

The CMINE is conceptualised and will be designed in an attempt to ensure its sustainability after the DRIVER+ project ends. In order to meet its sustainability ambition, a solid governance structure will be established that serves both the in-person and the online aspects of the CMINE. The CMINE governance will consist of dedicated *Chairs* leading a thematic working group, which together form the *Chairs Committee*; a *CMINE Head Chair* who is leading the *Chairs Committee* and a *Support Body* for each of the thematic working groups. These four overarching bodies will be responsible for the overall strategic management and technical maintenance of the CMINE. Apart from the roles related to the governance of the CMINE outlined below, the community also includes two types of roles that are not necessarily related to the management of the CMINE. These are the members of the CMINE and the visitors of the CMT. The CMT allows anyone to visit but only those that have registered, and thus became a member, are able to make use of the full spectrum of features including the in-person meetings. The specific features of both types of roles are detailed below.

5.1.1 The CMINE Governance

5.1.1.1 Operative body (chair)

The thematic working groups (as further described in section 5.3.2.2) are each hosted by a Chair who has been approved by the Head Chair (see section 5.1.1.2) and who is in charge for the day-to-day management of his or her thematic working group. The person needs to be an expert stakeholder from one of the stakeholder groups or a representative of an organisation active in a particular area of Crisis Management. Initially, one of the DRIVER+ partners will fulfil the operational role. Once the CMT has matured and developed an initial member base, experts from any stakeholder category can propose themselves as a candidate-Chair to the governance body (Chairs Committee). The Chairs committee will then vote upon this proposal. The candidate with the majority of votes will become Chair.

The Chair is able to coordinate and engage fully in the discussions and developments on a particular topic. Thus, the position of a Chair is particularly interesting to those who are keen to see progress within a specific theme and who would themselves (or their organisation) benefit from developments in the domain. As a Chair, one can partly steer the direction of a working group

Key is that the Chair itself is a professional in the theme in which the working group is active. The Chair will be in charge of leading the discussion on the designated forum on the CMINE tool as well as organising and preparing the in-person meetings. The Chair is, in other words, responsible for both the online and in-person

aspects of a working group. The Chair's task signal specific challenges or questions that are continuously mentioned; by recognising patterns in the needs and/or ideas of stakeholders, challenges are identified more easily and more precisely. The newly identified challenges could then be transferred to become a new thread in the discussion or they could be presented in the section on theme specific challenges. In addition, the Chair can propose (jointly with the Chair of another workgroup) that his/her theme should be addressed during the next cross-thematic working session. Subsequently, the Chair will provide for the agenda of this working session (if his/her theme is included in the agenda).

Furthermore, the Chair is regarded as the 'leader' of the working group, meaning that he/she has the responsibility of updating the working group whenever necessary with new events, polls and other relevant input. Being the leader of the working group also requires the Chair to be in charge of the course of the discussions. Besides, the Chair is in charge of ensuring the quality of the debate (both online and during the in-person meetings) as well as the course and direction of the discussion. In the online environment, the Chair is able to create new threads to accommodate discussions on a particular part of the topic. If the Chair signals that there is a need for members to discuss a particular sub-theme more in-depth, a new thread facilitating just that can be established. Members are able to propose the topic of a new thread but the Chair is the one who is able to approve and create this topic. In addition, the Chair will be in charge of creating a quarterly overview of the content of the discussion on the forum. In his role as a supervisor, the Chair is able to summarise the debate that has taken place and to highlight the most relevant contributions. These will be bundled in a quarterly overview, which provides both members of the discussion as well as bystanders with an update on the most relevant outcomes of the debate.

The Chair will primarily focus on the content of the discussion. He/she will liaise continuously with the support body (see section 5.1.1.3) about the issues that arise from the forum discussions, such as the use of language and off-topic comments but also complex content-related issues. The Chair of the Chairs will then advise the Chair on how to address the issues flagged.

Furthermore, the Chair will be in charge of fulfilling the watchdog position in which he or she monitors the behaviour of the members and flags any rule transgression. The Chair will here adhere to the norms and values of the CMINE which will be outlined in a in a specifically developed guidance document. A first draft of the document will be shared for review until the end of the next project period. The guidance document also contains specific netiquette rules (see section 5.3.4.1) which every member is asked to respect. Since rule transgression will nevertheless occur incidentally, the watchdog function is an important task of the Chair.

The Chair will be aided in the management of the working groups by a member of the Support body (see section 5.1.1.3).

Aside from the operational tasks, the Chair will also participate in the Chairs Committee. The tasks and responsibilities of this body are further outlined below. As the Chairs are part of both the operational and the strategic management of the CMINE, they play a crucial role and they will be asked to sign a pledge of commitment lasting two years. To ensure the quality and the continuity of the working groups, it is crucial that the Chair is committed and involved. This approach would also benefit the overall stability of the online environment of the CMINE.

In a nutshell, the chairs will be assigned the following tasks:

- Partake in the Chair of the Chairs
- Hosts working group
- Leads discussion on specific theme
- Responsible for quality of discussion both during in-person meetings and online
- Signals patterns and challenges during discussions
- Creates new threads when necessary
- Attend bi-monthly teleconferences
- Bi-annual in-person meetings
- Netiquette watchdog

5.1.1.2   Governance body (Chairs Committee and CMINE Head Chair)

At the launch of the CMINE, the governance body consists of the three Chairs that are each hosting a different working group (as presented above). These Chairs, thus, have a dual role as they do not only lead a working group, they are also involved in the strategic management of the CMINE. The Chairs Committee is led by the Head who is not a Chair of a working group. This Head will nevertheless have expertise on the Crisis Management domain but he/she will be less involved in the content of the CMINE and more engaged in the strategic management of the community. The Head Chair will be fully part of the governance body but will distinguish his/herself from the Chairs in that he/she will lead the body. This entails leading their meetings, carrying responsibility for creating the meeting agendas, and organising the in-person events. The Chairs will support the Head Chair in these tasks (in particular with regards to the organisation of the events).

Furthermore, the CMINE Head Chair will also be responsible for maintaining the email inbox of the CMINE. The email address of the CMINE will be posted on the CMT and this allows people to contact the CMINE directly. The Head Chair will be tasked with the forwarding of emails to the right individual (i.e. the Chair of a specific workgroup).

The first Head Chair will be selected based on his/her expertise and experience by the DRIVER+ consortium. Moving forward, the CMINE members themselves will have the opportunity to elect the Head for a two years term. When the end of the DRIVER+ project is nearing in mid-2019, an open call for members of Head position will be initiated.

The four members of the governance body have decision-making power and are responsible for the overall management and strategic direction of the CMINE. One of the main responsibilities of the governance body will be to support each other in the execution of their role as Chair of a working group on both the operational matters as well as on content. The Head Chair provides the Chairs with the opportunity to discuss issues or challenges they might be facing. It allows the Chairs to learn from each other's approaches and experiences.

The decision-making body acts on a voluntary basis and is expected to have bi-monthly teleconferences to discuss the management of the CMT as well as to address any issues or challenges regarding the management of the workgroups. These teleconferences allow Chairs to flag any (potential) issues that have arisen in the discussion fora or elsewhere on the working group pages. Moreover, the bi-monthly teleconferences help to facilitate synergies between the various thematic working groups. Through recurring virtual meetings, the Chairs will be very much aware of the developments and issues discussed in the different workgroups which allows them to draw links and foster cooperation.

Table 5.1 below gives an overview of the envisaged schedule of the Chairs Committee teleconferences until the end of the DRIVER+ project lifecycle.

Table 5.1: Overview of meetings of the Chairs Committee

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2018									■		■	
2019	■		■		■		■		■		■	
2020	■		■		■		■		■		■	

The responsibilities of the Chairs Committee can be perceived as concentrated on the strategic development of the CMINE. They are tasked with the continuous development and steering the direction of the CMINE.

In sum, the tasks of the governance body are the following:

- Support Chairs on content-related issues
- Bi-monthly management teleconferences
- Bi-annual in-person meetings with Chairs
- Decision making power
- Liaising with the support body and drafting a quarterly implementation report about the technical and administrative needs and challenges

The CMINE Head Chair will be responsible for the following tasks:

- Coordinate Chairs Committee meetings;
- Maintaining, answering and forwarding emails from the CMT inbox.

5.1.1.3   Support body

The day-to-day technical management of the CMT will be in the hands of ARTTIC. The organisation will be charge of the technical management of the platform. While the majority of the website's content is driven by members and the Chairs, the support body will be in charge of ensuring the members' needs are reflected in the technical features on the platform. The support body will aid the Chairs in the day-to-day management of the platform. Whereas the Chairs are specifically attached to a topic and its respective working group, the support body is responsible for managing the CMINE platform as a whole and to support the Chairs in technical related questions.

The following tasks will be executed by the technical support body:

- Addressing the technical needs and challenges which have been identified in the Chair's monthly report and advising about the technical feasibility
- Administrative support to the working groups and support members in creating registration pages for meetings
- Technical maintenance and upgrades of the CMT to match the needs identified
- When required, creating new threads.

While ARTTIC will concentrate on the technical maintenance and development of the CMT, each Chair is supported by a volunteer CMINE member, which each Chair can recruit in line with his or her personal preferences. A call for application template document for this task will be drafted by Ecorys in the next project period and will be handed over to each Chair after their inauguration. The Support body will therefore consist of one technical expert and three support assistants related to the three working groups that will be launched. The support assistants will aid the Chairs in their coordination [1] (i.e. organising teleconferences, preparing agenda's, preparing briefing materials, taking minutes, following up on action points) and, thereby, allowing the Chairs to be focused on the content rather than to be overly occupied with the practical management of the CMINE. Figure 5.1 provides on overview of the proposed governance structure of the CMINE.

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[1] Ideally, every Chair would be aided by two Support Assistants. As the CMINE matures, the size of the Support body could potentially be enhanced
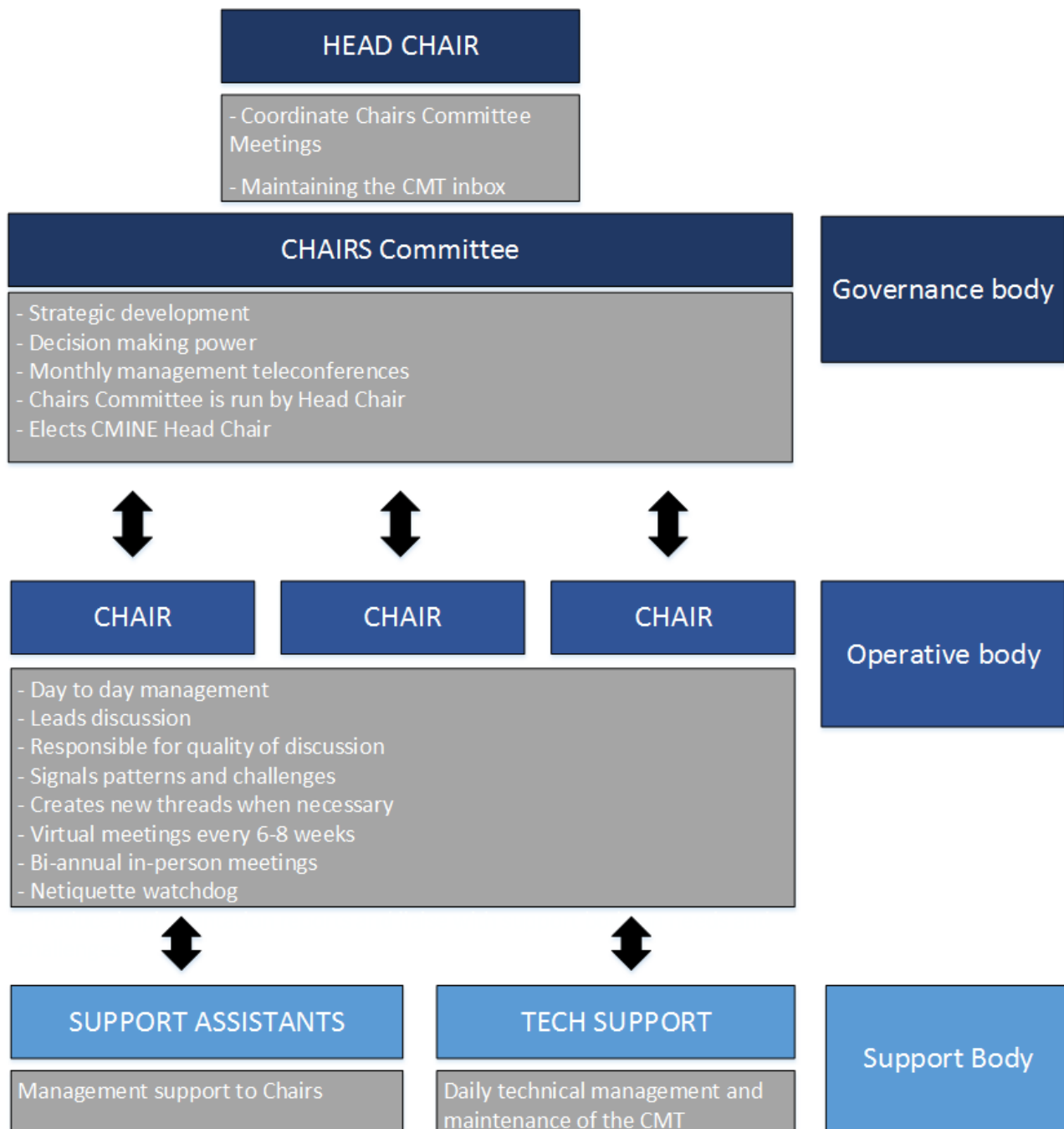
HEAD CHAIR

- Coordinate Chairs Committee Meetings

- Maintaining the CMT inbox

CHAIRS Committee

- Strategic development
- Decision making power
- Monthly management teleconferences
- Chairs Committee is run by Head Chair
- Elects CMINE Head Chair

Governance body

CHAIR　　**CHAIR**　　**CHAIR**

- Day to day management
- Leads discussion
- Responsible for quality of discussion
- Signals patterns and challenges
- Creates new threads when necessary
- Virtual meetings every 6-8 weeks
- Bi-annual in-person meetings
- Netiquette watchdog

Operative body

SUPPORT ASSISTANTS

Management support to Chairs

TECH SUPPORT

Daily technical management and maintenance of the CMT

Support Body

Figure 5.1: Governance structure of the CMINE

5.2　The CMINE in-person community

The CMINE in-person meetings are at the core of the community. These in-person gatherings provide members with the opportunity to meet each other face-to-face, discuss ideas, and exchange knowledge in this setting. Various types of in-person meetings are envisaged, each with a different aim and each attracting different experts. Ideally, the in-person meetings will be combined with other relevant meetings to ensure the broadest possible interaction between relevant stakeholders at national, EU and international level.

In order for the CMINE to be relevant and to be able to continue existing after the lifespan of the DRIVER+ project, it is crucial to create a steady rhythm of in-person meetings that members can build on. While the in-person meetings are at the core of the CMINE and determine (for a large part) the success of the CoP, Wenger's recommendations on 'starting small' will be taken into account. Therefore, when the CMINE is

launched, a number of in-person meetings will be scheduled. However, in order not to overwhelm the members, this number will be kept relatively low (i.e. one annual meeting per thematic working group). Once the CMINE has reached a more mature stage, the frequency and type of meetings can be enhanced. It is also to be noted that during the duration of the DRIVER+ project, these events will be organised or collocated with major DRIVER+ events (i.e., General Assembly, I4CM events, final conference, etc.).

Initially, three themes will be selected to be linked to a respective working group each. These working groups will constitute the core of the CMINE community and its Chairs and members will be invited to meet up in person during the cross-thematic working sessions (as outlined below). The different working groups are not to be perceived in silos but instead active cooperation and synergy building should be encouraged (partly during the in-person meetings). The Chairs of the respective working groups will guide the discussion and direction of the group and this person will be in charge of defining the agenda of the in-person meetings based on the discussions of previous meetings and the debates on the CMT. Furthermore, the members of the workgroups will also be invited to share challenges they would like to see solved so that they can be addressed during the cross-thematic working sessions and on the CMT.

For now, the types of in-person meetings envisaged for the CMINE are described in the sub-sections hereafter.

5.2.1   CMINE Kick-off meeting

The CMINE kick-off meeting will be held in parallel to the last CoU High level meeting in November 2018. This meeting will be crucial in the dissemination process of the CMINE. Therefore, all attendees of the CoU meeting to be held in November 2018 will be invited to join the kick-off meeting where the project team will provide a presentation on the CMINE as well as it will announce the first dates of the cross-thematic working sessions. All participants of the CoU meeting will receive an easy-to-access link to register themselves in the online platform and during the kick-off meeting facilities will be installed for people to register directly on the spot.

While the CMT will be already launched, to ease the identification and recruitment of practitioners, solution providers and experts in the DRIVER+ activities, the aim of the kick-off meeting is to generate as much interest as possible and to make potential members aware of the existence and possibilities of the CMINE. The CoU meeting would be an excellent place to launch the CMINE as it will be attended by many potential members.

5.2.2   Cross-thematic working sessions

It is at the core of the DRIVER+ project to build synergies and to enhance cooperation. Therefore, once a year, the CMINE will organise cross-thematic working sessions where two or more themes are discussed jointly. The idea behind the cross-thematic sessions is to foster cooperation and information exchange among the different themes. Therefore, these sessions will be designed in such a way that members are able to discuss issues pertaining both to a specific theme (thematic sessions) as well as to cross-thematic issues. The duration of these sessions depends on the amount of themes covered. Ideally, the gatherings would commence with half a day of thematic sessions and would then leave time for the members to discuss cross-thematic issues.

The Chairs will be in charge of guiding these working sessions and preparing the agenda and structure of the session. The first cross-thematic working session is envisaged to be held in July 2019.

The team is still exploring options regarding the organization of these cross-thematic working sessions. This will be further developed in the upcoming months and presented in the next progress report. For now, one option that is being considered is to have the event coordinated by the Head Chair and the governance body who will be supported by a dedicated event committee consisting of CMINE member volunteers and students who are interested in the crisis management domain. As an incentive to participate, these volunteers will be introduced to pre-selected experts in their specific area of interest, which will offer them a great networking opportunity and eventually may aid them in their career.

Besides the fostering of synergies between the various working groups, the event will also facilitate networking among members and Chairs, which will, in turn, build the CMINE foundations. This set-up invites members to attend the cross-thematic working groups as it allows for networking and strengthening of relationships. Furthermore, it gives them an opportunity to engage in a debate specifically targeted at one particular challenge as well as on multiple related themes in the crisis management domain. Figure 0.3 presents an initial timeline of the envisaged in-person meetings.

Figure 5.2 Initial overview of in-person meetings envisaged

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2018											██	
2019							██					
2020							██					

CMINE Kick-off meeting	██
Cross-thematic working sessions	██

The working assumption is that as soon as the CMINE has reached a solid member base and has become an important element for the Crisis Management domain, non-guided in-person meetings will be a logical continuation of the vital online interactions of stakeholders. The CMINE encourages members to meet in-person outside of the organised meetings. If a certain set of members interested in a particular thematic area decide to schedule an in-person meeting, the CMINE will support this through posting this meeting on its online portal.

The project team fully acknowledges the importance of real-life encounters and believes that back-to-back meetings are a quintessential element for the future success of the CMINE. While the online environment will be an important component of the initiative, especially during its early phase, guided and non-guided offline events will gradually be added to the CMINE portfolio as the community grows. The main objective of the CMINE is to create a dynamic and active platform, which naturally becomes a living and breathing community. However, the intention of the CMINE is not to fully transform the virtual community into the real world, but to facilitate an on-going interaction between the online and the offline components of the initiative.

In addition to the in-person meetings envisaged for the CMINE mentioned above, two major gatherings are planned in the context of DRIVER+, in order to seek interaction and facilitate exchanges amongst its members: the Policy Research-Dialogue Roundtables and the Innovation for Crisis Management events. These events are described below, together with an overview of the current status of their respective organisation.

5.2.3 The Policy Research-Dialogue Roundtables

Complementary to the CMINE in-person meetings mentioned above, and in order to further strengthen the Policy-Research Dialogue, three roundtable discussions will be organised in the context of DRIVER+, to discuss with policy-makers the results of the Trials/final demonstration and of the related workshops as well as the potential EU policy implications with policy-makers. The organisation of these Policy-Research dialogue roundtables will be done in close collaboration with DG HOME and DG ECHO, and will whenever possible be organised as side-events of the Community of Users' meetings and/or the Civil Protection Forum.

5.2.3.1   Rationale: the EU added value of DRIVER+ and sustainability

The European dimension of the DRIVER+ Trials and the final demonstration will be implemented in various ways. First of all, the Trials are not simply challenging scenarios, but are centred on a number of gaps (1) identified by the practitioners within the consortium, and (2) coming out of the DG HOME's First Responders Capability Gaps study. Furthermore, a Gaps Assessment Workshop hosted by Valabre (France) from 15 to 16 January 2018 with external practitioners participating from the EU crisis management community aimed at:

- Identifying the gaps the Trials end-user partners are interested to focus on, and better understand and describe such gaps;
- Enlarging the acceptance of the identified gaps by the wider CM community by engaging with practitioners beyond the project consortium ;
- Ultimately, ensuring the project's added-value to practitioners by grounding the DRIVER+ Trials on validated gaps assessments.

The main gaps that will be addressed are related to (1) Cross-Border Tasking and Resource Management, (2) High Level Coordination, (3) Volunteer Management and (4) Situation Assessment and Logistics. (The full list of gaps will be documented in D922.11 – List of CM gaps due in March 2018). Also, the final demonstration will explicitly address the added value the EC/ERCC can bring into play in the particular crisis scenarios addressing these gaps. Furthermore, each of the Trials as well as the final demonstration will:

- **Include cross-border and international issues** in the underlying scenarios, requiring the crisis management organisations of Member States to work together. International and/or EC actors (e.g. ERCC) may act as real players in the scenarios or will be simulated by experienced exercise staff.
- **Use relevant EU policy documents**, as well as international agreements as input for the scenario development. The evaluation of each Trial will also provide recommendations for improving, updating and/or support for the implementation of these policies, like RescEU and the Sendai framework.
- **Identify recommendations for standard development with respect to the needs and gaps** addressed by the solutions demonstrated in the Trials, as well as for the Test-bed and its procedures.
- **Work closely with evaluators and/or observers from the EC** as well as from various European and international practitioner organisations.
- **Conclude with conducting a workshop (or a survey) on the effectiveness and usability of the trialled solutions**, and in particular on their potential added value in other countries and/or specific European actions and mechanisms (transferability), as well as the best practices and lessons learned for their implementation.

Identified relevant members of the CMINE (i.e. Practitioners, solution providers, experts and policy representatives (at both MS and EC level)) will be invited to participate in the Trials and will be informed about the project, the results and the potential policy implications. Moreover, each of the Trial owners will connect to the relevant practitioners and their networks in the respective Member States. This will contribute to establishing and/or strengthening the links between European projects and networks on the one hand, and related national initiatives on the other.

Wherever possible, DRIVER+ will actively seek opportunities to combine the Trials with planned Civil Protection (CP) exercises from DG ECHO and/or other (inter)national events. These exercises often involve several practitioner organisations from various Member States. Although it will be challenging to fully align the timing, objectives and scenarios of a Trial with a planned CP exercise, we will strive to achieve a strong alignment and to have experts participating in both activities.

Within the H2020 Secure Societies work program, five Practitioner Networks (under topic GM-21) have been granted: a network of firefighters (Fire-In, coordinated by SAFE Cluster, France) a regional network for the Danube-region (DAREnet, coordinated by THW, Germany), a network of CBRN training centres (eNOTICE, coordinated by UCL, Belgium) and two LEA networks (I-LEAD and iLEAnet, coordinated by the Dutch National Police and the French Ministry of Interior, respectively). DRIVER+ contacted all these European practitioners' networks and is discussing arrangements on how to cooperate during the Trials and other activities (e.g. exchanging experts, participating in workshops, sharing best practices etc.).

In order to further strengthen the Policy-Research Dialogue, round table discussions will be organised by DRIVER+, to discuss the results of the Trials/final demonstration and of the related workshops as well as the potential EU policy implications. The organisation of these Policy-Research dialogues will be done in close collaboration with DG HOME and DG ECHO, possibly organised as accompanying side-events to the Community of Users' meetings and/or the Civil Protection Forum.

Furthermore, ensuring the sustainability of the DRIVER+ results requires an easy access of practitioners, industry and policymakers to the Test-bed and the Portfolio of Solutions. Therefore, these results will be open source so they will be accessible after the project lifetime. Furthermore, the sustainability is ensured by connecting to relevant EU bodies and initiatives:

• **The Disaster Risk Management Knowledge Centre** (DRMKC): DRIVER+ can contribute to exploiting and translating science into useful policy and applications in Disaster Risk Management. Additionally, the Portfolio of Solutions can feed lessons learned into the common repository of relevant research and operational projects and results. Moreover, DRIVER+ can support developing innovative methods, tools and technological solutions, as well as addressing technological and operational challenges to cover existing and emerging gaps. Finally, DRIVER+ will contribute to building globally common standards.

• **The Community of Users on Secure, Safe and Resilient Societies**. DRIVER+ is already having a regular exchange with DG HOME on contributing to the CoU, which is enforced by project partner Ecorys who is supportive in running the CoU. In this way, knowledge sharing between the CoU and the DRIVER+ network is enhanced, and communities/networks may be synchronised.

Given the EU added value of DRIVER+ and its sustainability ambition as described above, an active involvement of DG ECHO / ERCC is recommended. In this way the relevance, usability and consequently the sustainability of the results can be better tailored to the specific conditions and policy developments within DG ECHO / ERCC. Given the timing of activities presented above, and acknowledging that an active involvement of DG ECHO / ERCC staff requires timely preparation, the following contributions were/are suggested, chronologically ordered.

• Participate in selected workshops, e.g. the Gaps Assessment Workshop (January 2018) and the Workshop 0 (February/March 2018).

• Provide feedback on the policy-relevance of the Trial scenarios; DRIVER+ intends to discuss with the respective policy makers which policies could be addressed (e.g. Sendai framework, Civil Protection Mechanism), how these may be implemented in the Trials, and what the implications are for the potential involvement of DG HOME, DG ECHO / ERCC staff during the Trials (i.e. participant, evaluator, observer).

• Participate as observer during Trial 1 (May 2018) and Trial 2 (October 2018).

• Active involvement in Trial 3 (May 2019) and Trial 4 (October 2019), as well as the Final Demonstration (November 2019).

• Contribute to discussions on the results of the Trials and final demonstration and the potential EU policy implications.

Thus, in order to strengthening the Policy-Research Dialogue on research and demonstration activities in Crisis Management and increasing the EU added value of the DRIVER+ Trials, three Policy-Research roundtables involving policymakers will be organised during the project duration:

• Two editions before the Trials and final demonstration to allow exchanges on the potential EU policies to be addressed and the involvement of DG HOME, DG ECHO /ERCC staff.

• One after the events to allow exchanges on the results and the potential policy implications.

5.2.3.2   Status of the organisation of the first edition

Contact has been initiated with DG HOME and DG ECHO in December 2017 in order to enquire about the possibility to organise the first edition of the Policy-Research Dialogue Roundtable on the occasion of the Civil Protection Forum in Brussels in March 5 to 6, 2018. However, after further discussion and given the complementary of the themes to be addressed, it was agreed to rather organise the event in conjunction with the CoU meeting to be held in June 2018. As the first Trial will be conducted in May 2018 in Poland, it will also allow the consortium to present the initial results. The DRIVER+ partners, together with DG HOME are currently working on identifying relevant representatives from DG ECHO, DG HOME and the ERCC to be invited.

5.2.4   The Innovation for Crisis Management events

5.2.4.1   Rationale and objectives

The Innovation for Crisis Management (I4CM) events aim to contribute building a momentum/shared understanding in CM through the organisation of an annual event focusing on CM topics, allowing addressing issues of common interest, to develop synergies between initiatives, and to discuss the research roadmap for Horizon 2020 and beyond. The aim of the event is in first place to allow local/regional practitioners and solution providers to meet and exchange on best practices and lessons learnt, while providing projects and initiatives with an opportunity to increase their visibility and impact in and to liaise with any interested stakeholders, including organisations developing similar projects in other regions of the world. The other way around, it makes SEC projects accessible to a wider range of external stakeholders in a specific region. Although well-known events focusing on Security Research, such as the Community of Users, already exist, an occasion able to bring together practitioners, CM experts, solution providers and researchers from a specific region, but also from both within and outside of the European Commission programmes was still lacking. The Secure Society programme is an ideal framework to ensure that the research and actions funded through Europe public funding achieve a wider impact beyond the academic world, are fully benefiting the practitioners, and are nourished by projects external to the EC framework.

The I4CM initiative are complementary to the European Commission DG Home´s Community of Users (CoU), providing a relay at EU level, where the DRIVER+ and I4CM results will be disseminated on the occasion of the plenary and thematic sessions.

The DRIVER+ I4CM events are co-hosted by DRIVER+ research, platforms and end-user partners based in the Member State where the I4CM event will take place. The topics will be chosen individually for each event, depending on the host's and host's networks' interest and pressing regional issues to be solved when it comes to Crisis Management.

5.2.4.2   Status of the organisation of the 3rd edition

The third edition of the event will take place in Warsaw (Poland) and will be hosted by ITTI (Poland), DIN (Germany) and PSCE (Brussels). According to the Description of Work, it was expected to organise the event in co-location with Trial 1 originally planned in June 2018. However, after further discussion with the Trial owner it was agreed to organise the I4CM as an independent event. The reasons are the following:

- The planning of the Trial has been brought forward, therefore leaving less time to organise the event, source the relevant speakers and raise awareness and interest from the expected audience.
- Trial 1 intends to last 5 days. Though the Trial itself will last between 1 and 2 days, the exercise will be complemented by several workshops to allow involved practitioners, solution providers and experts to coordinate before and report afterwards. Therefore, there is no or little time to organise the I4CM in conjunction without taking the risk of losing the main target audiences and the members of the consortium.

For the reasons mentioned above, it was agreed amongst partners to not held the I4CM back-to-back with Trial 1, but to rather organise it in September 2018 and seize it as an opportunity to showcase the results of this major project milestone.

5.2.4.3   Programme Committee

The I4CM Programme Committee has been set-up in January 2018 (see Annex 2) and is composed of the task leader (ARTTIC), the event hosts (ITTI, DIN and PSCE) and scientific coordinators (TNO, DLR and WWU). The task leader is mainly responsible for the logistic of the event, the hosts provide the knowledge of the country and therefore the core topics to be tackled, the other members are responsible to ensure the scientific relevance of the programme. The roles and responsibilities of the Programme Committee agreed upon by the members are:

- To ensure the appropriateness and relevance of the programme
- To identify/ support the sourcing of speakers
- To evaluate the open call submissions

5.2.4.4   Expected audience

The expected number of participants is 200 over the 2 days and the target audiences will consist of:

1. **Crisis Management practitioners** with operational knowledge to guide research and innovation, primarily from Poland
2. **Crisis Management solution providers** from industry and research offering innovative technology and/or knowledge,
3. **Experts on various aspects of Crisis Management** having specific knowledge and expertise, in particular with respect to operational and strategic/political challenges, specific technological requirements, challenges related to regulations and standardisation, and challenges related to evaluation processes.
4. **Policy makers** working on the regulatory framework for Crisis Management operations.
5. **Related project and initiatives.**

5.2.4.5   Themes to be addressed

The initial set of themes identified is as follows:

- Standardisation
- Social innovation/Responsible Research and Innovation
- Sustainability
- Trial 1 results and Trial 2 way forward

Moreover, pressing regional/national issues in Poland and the region will be addressed and should be identified. Contact has been initiated with ITTI, SGSP and SRC to gather initial thoughts and ideas. In order to validate but also extend the initial list of topics identified by the members of the consortium, a survey will be created and circulated to gather additional feedback from externals using the DRIVER+ consortium's network and taking advantage of interest already expressed by relevant initiatives from Poland to join the CMINE. Finally, further themes might be identified, to ensure that the ones addressed/to be addressed by the CoU in June and November 2018 are reflected in the programme of the I4CM.

5.2.4.5.1   Format and venue

The event will last two days and will most likely be held at the Copernicus Science Centre in Warsaw (Poland) in September 3 and 4, 2018. The event will be structured around two parts with different objectives, whose draft concept (currently under discussion with the Programme committee) is introduced below:

Day 1 - I4CM Conference: the conference will take place in the morning of September 3rd and will aim at linking the European Commission and its policy-makers, with the national policy representatives, practitioners, and related-projects to inform attendees about the role and future of security projects in the Horizon 2020 framework and beyond. It should also provide the occasion to exchange on the outcomes of the first Trial of the project. In order to reach a certain level of interactivity, the conference will include both bottom-up and top-down session where policy makers, practitioners and initiatives or projects can initiate dialogue and exchange their views.

Day 2 – I4CM OFF programme: the OFF programme will last one day and a half on the afternoon of September 3rd and the whole day of September 4th. It will alternate parallel workshops, hands-on sessions with roundtables and will be closed by a BarCamp where attendees can present their CM related ideas, activities or solutions. A marketplace will be central to the event, allowing practitioners to discover innovative CM solutions. It will allow attendees to partake in interactive sessions, to meet, share experiences, and learn more about ongoing Security / Crisis Management initiatives as well as other EC-funded projects. Furthermore, an Open Call will be organised, whose winners could be awarded with the possibility to be part of a dedicated session on the main stage where they could introduce their project (in case of presentations) and with a space to organise an activity (in case of workshops or other interactive activities). The proposals could be evaluated by the Programme Committee and ranked following specific criteria (e.g. relevance to CM, speakers' potential, originality, etc.)

5.3   CMINE online environment

The CMINE has an umbrella function, facilitating the creation of linkages and connections between existing networks and initiatives in the Crisis Management domain. While the core of the CMINE will be the offline activities, providing a space for in-person meetings (cross-thematic working groups and annual meetings) where stakeholders from different backgrounds are able to interact, exchange ideas and enhance their networks, the cement of the CMINE will be the online environment where these stakeholders can interact with each other from any location and at any time. This online feature will be crucial to ensure the effectiveness and success of the in-person meetings. Moreover, it will be an important tool to ensure the scaling of best practices and, ultimately, the impact delivery across Europe.

As the DRIVER+ project deeply values transparency, the aim is to make the online platform widely accessible, but also easy to access and use. This section will therefore elaborate upon the specific features and structure of the CMINE's online environment, supported by the Community Management Tool (CMT).

5.3.1   Introduction to the Community Management Tool

The Community Management Tool (CMT) is the online tool developed by ARTTIC supporting the working structure of the CMINE. The CMT will constitute the technical backbone of the CMINE, and serve as the online "meeting place" for the CMINE members to interact and share information, experiences and best practices. By overcoming the limitations of time and distance, it will provide a platform to continue the discussions beyond the in-person meetings and/or events, therefore also allowing for the storage of relevant information, access to a wider knowledge base and enabling targeted communication. The CMT will also provide a vehicle for liaising with relevant research and innovation projects. The tool will also facilitate the discussions and working relationships between the consortium partners and the other members of the CMINE. Especially, the CMT intends to support the CMINE by providing an online space aiming to:

- Facilitate effective collaboration, enable collective intelligence and learning, support better decisions and forecasts in a complex collaborative world;
- Foster better collaborative decisions and problem solving: reflecting multiple view points; factoring in factual data and opinions in a transparent way; streamlining the process; effective consensus development;
- Build knowledge bases by sourcing collective expertise;

- Seek wisdom of the crowd - Better crowd decisions: letting crowds learn, factor in different opinions and make decision making a transparent process.

5.3.2 Organisational structure

Following the guidelines set out by Wenger (11) (see Section 3), which lay out the foundations of contemporary Community of Practice building, the initial form of the CMINE's online environment should be simple albeit effective. As DRIVER+ deeply values the sustainability of the CMINE after the end of the project duration, much time, effort and resources will be invested into the building phase of the CMT which gives birth to the CMINE online environment, to develop the necessary features for information exchange and interactions. It is argued that in order to enhance the sustainability of the CMINE, it is crucial to invest in the fundamental features of the platform before expanding the network's features horizontally. Moreover, the in-person aspect of the CMINE is at the core of the initiative and, therefore, the CMT will merely function as a complement.

Therefore, the initial version of the CMT will be primarily centered around the functions that allow the members to connect with each other as well as on the features that enable them to exchange knowledge and best practices with each other. Fostering synergies and cooperation is one of the aims of CMINE and, therefore, the structure of the online platform will be principally geared towards this goal.

5.3.2.1 Overarching themes and sub-themes

The thematic scope of the CMINE has a significant impact on the overall structure and functioning of the community. While still subject to change at this stage of the development process six overarching thematic areas are planned, which will act as the backbone of the work carried out by CMINE. These themes will be selected to function as overarching categories under which various sub-themes will be classified. The broad themes will serve as umbrella topic, representing a variety of related sub-topics. At the launch of the CMINE, and to remain close to Wenger's notion to keep the CMT simple at the start, three themes will be identified and a working group will be assigned to each of them. The other three themes and respective workgroups will be developed over time. This setup should allow for easy navigation throughout the CMT as well as it should facilitate effective exchange of information and knowledge between those who are most familiar with a specific theme. Moreover, it enables those who are less familiar with the topic to learn more about it in an effective manner. However, this proposed structure will be closely developed in line with the needs of the users.

5.3.2.2 Thematic working groups

The working groups aim to foster communication and exchanges between stakeholders from various categories about a specific theme, as introduced in the section above. They function as a specialised online platform where members engaged in a particular topic are able to find each other and discuss questions, thoughts, and ideas they might have. The pages on the working groups include a forum where members can engage in diverse discussions (i.e. a general communication thread). Besides, the page will include (at least) one predefined challenge (see section 5.3.2.4) which allows for a more targeted debate centered on a particular issue within the theme.

DRIVER+ Working groups are open to join for any interested stakeholder of the CMINE. The only prerequisite for participation is that an online profile needs to be created on the CMT. Once this has been done, anyone can participate in the forum discussions.

In sum, the working groups aim to bring together stakeholders that are active in a specific thematic area to share ideas and knowledge. The nature of the CMINE allows for much freedom on the side of the members and, thus, they are able to have a vast impact on the content, process and outcome of the discussions. The CMINE allows the goals of a discussion forum to be altered throughout the debate; members are able to

decide whether the debate should be steered into the direction of creating a tangible solution or whether merely exchanging best practices and knowledge is sufficient.

The Chair of the thematic working group plays a vital role in steering the direction of the working group's discussions. The Chair is responsible for ensuring that the discussions do not deviate too much from the respective theme it belongs to. If the discussions do deviate too much, the Chair can decide to create a new thread. Once crucial decisions about the goal of a discussion have been made, these will be communicated in the monthly forum overview.

5.3.2.3   External Cooperation Platforms

As stated in D912.11 – Procedures and themes of reference for the involvement of external stakeholders in DRIVER+ Trials (15), in order to offer an area for online interaction between various stakeholders, members of the CMINE will be given the opportunity to register to one of three external cooperation platforms depending on their profile and expertise:

1. **External Cooperation Platform for practitioners** wanting to exchange safely with other European practitioners.
2. **External Cooperation Platform for solution providers** wanting to present and discuss innovative solutions.
3. **External Cooperation Platform for Crisis Management experts** wanting to exchange and discuss about relevant topics in the area of Crisis Management.

The objective of these platforms is to create a well-structured pool of expertise and knowledge that is available to the project and supports its activities. This pool will be used to recruit external stakeholders for concrete external cooperation actions. Members of the CMINE can either be invited to join one of these platforms by an administrator for the platform or ask to join themselves. When a request to join one for one of the platforms is sent the requesting member is asked to motivate his/her wish to join the platform as well as to share his/her profile information, in order for the platform administrators to be able to judge if the request is relevant or not.

5.3.2.4   Thematic and cross-thematic Challenges

Each thematic working group will include a specific challenge that has been identified the Chair of the respective working group. This challenge represents a particular issue within the theme that is in dire need of attention. The challenge can refer to the need for a specific tool (i.e. equipment, technology, methodology, etc.) as well as it could relate to the emergence of a new type of thread within a theme. A challenge is understood in a broad sense and, therefore, the findings from the scoping interviews and the input received during the CoU meetings will be leading the identification of the challenges.

Within the first six months after the launch of the CMINE, one cross-thematic challenge (level 2 challenge) and one challenge per theme (level 1 challenge) will be identified, as outlined in the figure below.
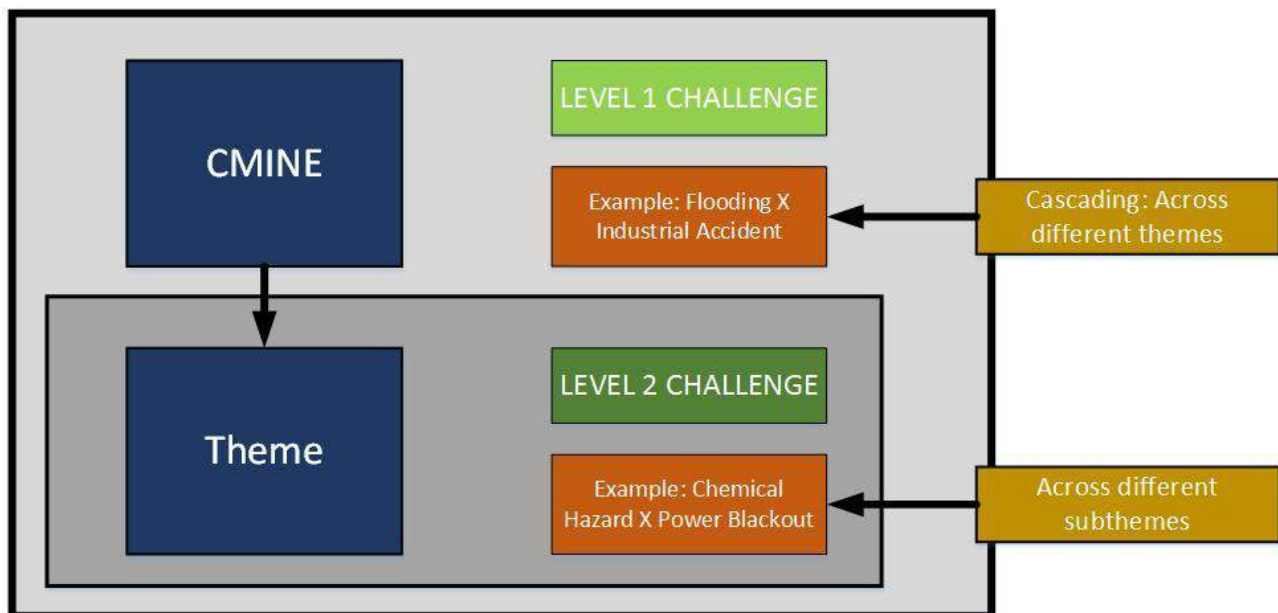
Figure 5.3: Challenges and cross-thematic challenges

Once the CMINE has been established, new challenges will be posted in coordination with the Chairs. These challenges will be identified through suggestions of the Chairs and the members.

The challenges are assigned a separate discussion thread within the thematic workgroup in which a more focused discussion is encouraged. The Chair will also be in charge of guiding the discussion on the thread about a particular challenge. Two potential results can be expected from a particular challenge discussion. Firstly, an acknowledged common challenge and related common capability gaps, second, at least in some cases, an idea for a potential solution to a specific challenge. These findings can then be communicated and disseminated on the CMT page and via other communication channels. The eventual goal of this process is that solution providers become aware of the needs and gaps which exist in a thematic area or cross-thematic areas and might be encouraged to develop tailor-made solutions.

5.3.2.5   Vote4Challenges

An important participatory measure of the CMINE is the voting tool feature. CMINE members are able to propose challenges they would like to see addressed. Challenges that are deemed relevant and pressing can be proposed to the chairs who will present (a selection of) these suggestions directly in the CMINE working group in case of a thematic challenge (level 1 challenge) and on the CMINE dashboard in case of a cross-thematic challenge (level 2 challenge). Through a poll, named 'Vote4Solutions', all member of a working group (and all CMINE members of cross-thematic challenges) are able to vote for the challenge they would like to see addressed in CMINE. Once the poll has been open for a month, the proposed challenge which gained most votes will be transformed in an actual challenge that will be placed in one of the working groups of the CMINE or on the CMINE dashboard in the case of a cross-thematic challenge.

From a technical perspective, it will be further inquired with the CMT development team (ARTTIC) whether the Vote4Challenges feature can be promoted both through the CMINE platform as well as on the various relevant websites and on social media channels. This way it can become an innovative dissemination tool for the CMINE and reach potentially new members who are not aware of the initiative. The feature allows users to propose challenges they would like to see addressed, which in turn, should enhance the interactivity of the website as it invites actors to critically reflect upon the Crisis Management domain they are active in. Moreover, allowing users of the platform to have a say in which challenges will be addressed, the relevance and use of the CMT will be significantly enhanced, as there is a better match between demand and supply.

5.3.3 CMT features and status of the developments

5.3.3.1 CMT overall structure and CMINE framework

The CMT supports the theme-based structure. When registering on the CMT, the CMINE members will be given the possibility to join one of the thematic working groups, which will then show related subthemes. Clicking on the overarching theme, will direct the members (or visitors, if they do not have yet created a profile on the CMT) to a page where the respective theme is described and where the online activity on the respective subtheme is presented and to be accessed. The page on the subtheme also includes a section on current challenges in the realm of the subtheme.

At theme-level, a working group is established where members can exchange their ideas, questions and knowledge. The working group page shows the discussion forum that includes one or more threads. The working groups are aimed at facilitating knowledge exchange and discussions among stakeholders from various groups about a particular topic.

The CMT will be structured in such a way that interaction between stakeholders is encouraged. Facilitating the exchange of knowledge, best practices and valuable insights is at the core of the CMT. Continuous interaction is enabled by the working group's discussion fora, through the Vote4Challenges and through the transparent nature of the platform, which allows members to get each other's contact details in only a few clicks. The figure below provides an overview of what the CMINE framework will look like.
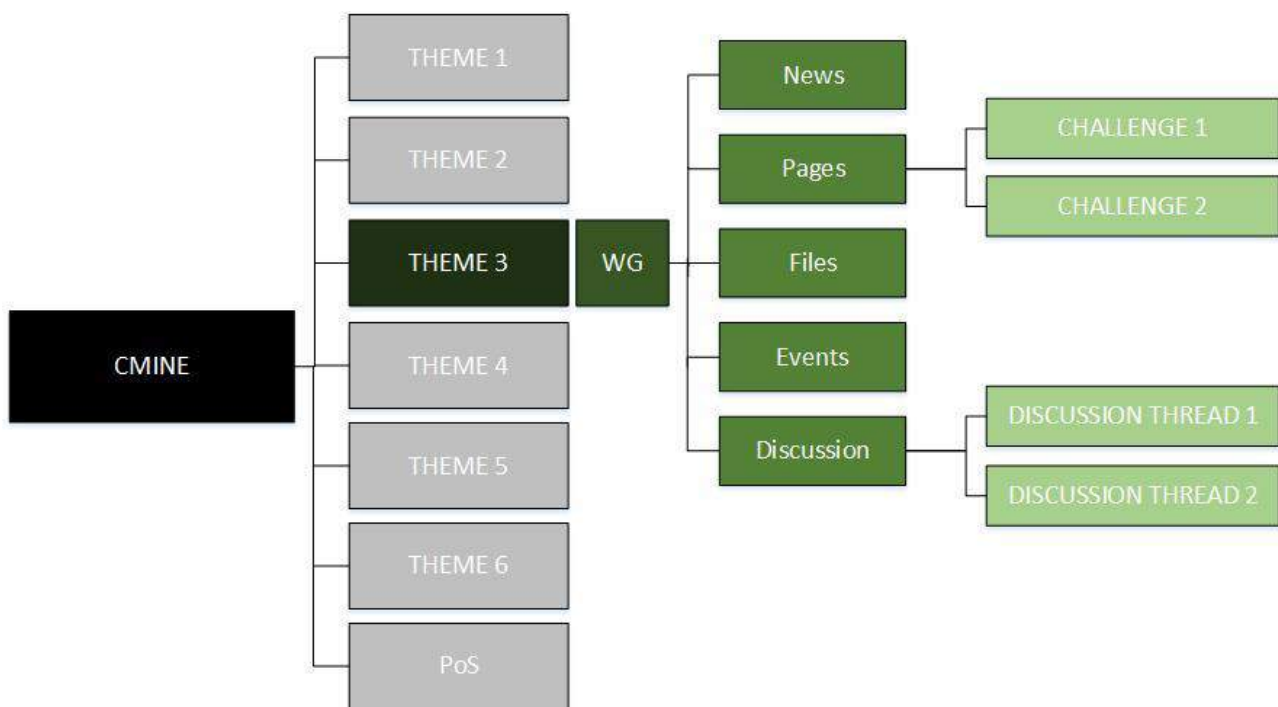
Figure 5.4: CMINE Framework

5.3.3.2 Current CMT development

The below sections intend to provide an overview of the technical developments that have been made so far, leading to the set-up of the Community Management Tool (CMT)

The CMT is a collaborative website based on ELGG (an award-winning open source social networking engine) customised by ARTTIC to fulfil community building, decision making, and communication exchanges. More information about ELGG can be found here.

5.3.3.2.1 Data Structure of the CMT, registration, profile and associated rights

The data structure of the CMT is structured around "members" and "virtual structures", which are implemented through "groups" on the CMT. Virtual Structures are used to model online communities such as the CMINE.

Virtual Structures and accessibility

A virtual structure represents a member group to which community members can connect, together with a range of services available to the members of this group. Such services include news, discussion groups, shared documentary resources, etc. They may be of permanent or temporary nature. They are used by the CMT to respond to different identified needs ranging from communities of interest to event organisation and management.

The tool has been developed so as to ensure that virtual structures can either be "**open access**" or "**closed**" (upon invitation only).

Member's registration

In order to become a member of the CMINE and to create their profile, the visitors first have to register on the CMT by completing the registration form as shown in Figure 5.5. In order to simplify the process, future members are also provided with the possibility to register through their LinkedIn account.

Figure 5.5: Screenshot of the CMT registration page

Moreover, it has to be noted that an email invitation (see Figure 5.6) has been drafted and will be sent to all potential members who have been identified and who have expressed an interest in joining the CMINE.
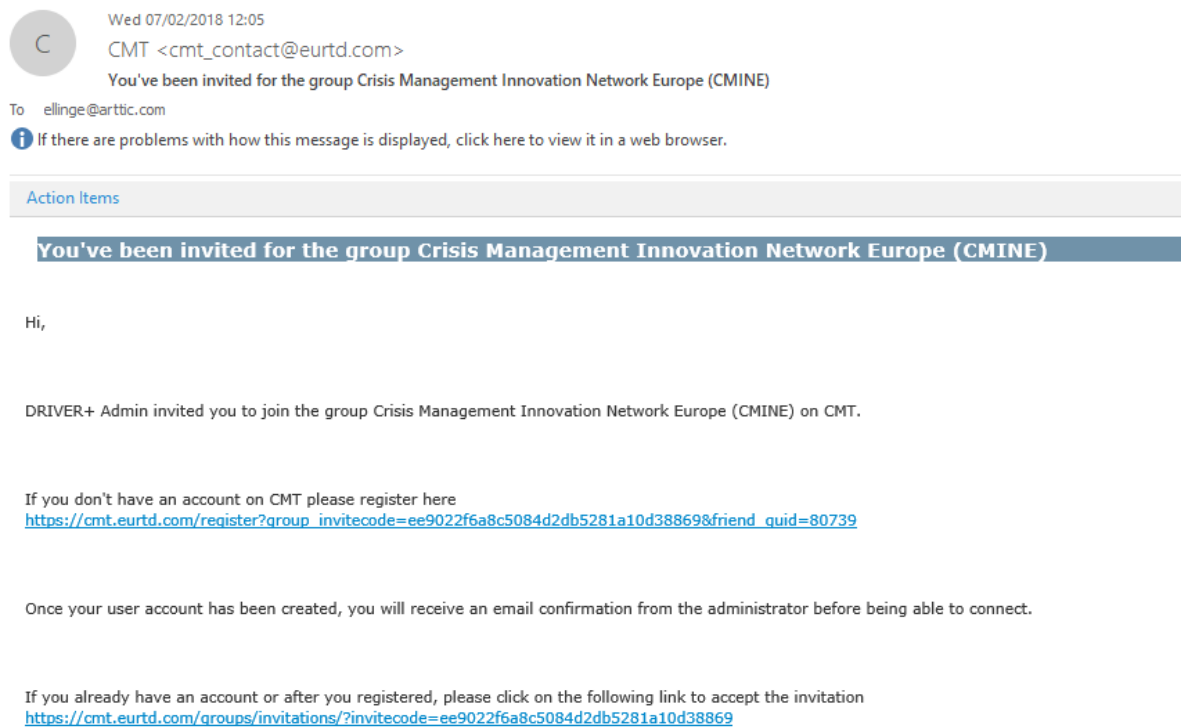
Wed 07/02/2018 12:05

C CMT <cmt_contact@eurtd.com>

You've been invited for the group Crisis Management Innovation Network Europe (CMINE)

To   ellinge@arttic.com

ⓘ If there are problems with how this message is displayed, click here to view it in a web browser.

Action Items

You've been invited for the group Crisis Management Innovation Network Europe (CMINE)

Hi,

DRIVER+ Admin invited you to join the group Crisis Management Innovation Network Europe (CMINE) on CMT.

If you don't have an account on CMT please register here
https://cmt.eurtd.com/register?group_invitecode=ee9022f6a8c5084d2db5281a10d38869&friend_guid=80739

Once your user account has been created, you will receive an email confirmation from the administrator before being able to connect.

If you already have an account or after you registered, please click on the following link to accept the invitation
https://cmt.eurtd.com/groups/invitations/?invitecode=ee9022f6a8c5084d2db5281a10d38869

Figure 5.6: Email invitation for invitees not yet registered in the CMT

Once the form has been sent out, the future members receive a confirmation email from the administrator of the CMT (ARTTIC) to inform that the account has been activated (see Figure 5.7). They can from this stage log on, create a profile, browse the CMT and join the thematic working group(s) of their interest.

Wed 07/02/2018 10:17

C driverplus-arttic-request@eurtd.com on behalf of CMT <cmt_contact@eurtd.com>

[driverplus-arttic] DRIVER+ Admin please confirm your email address for CMT!

To   DRIVER+ Admin

ⓘ If there are problems with how this message is displayed, click here to view it in a web browser.

Action Items

DRIVER+ Admin please confirm your email address for CMT!

DRIVER+ Admin,

Before you can start you using CMT, you must confirm your email address.

Please confirm your email address by clicking on the link below:

https://cmt.eurtd.com/uservalidationbyemail/confirm?u=80739&__elgg_mac=uPWdAxC-n3cYDyeNCBqf25v4no93ljQkf1St-IeKJcq

If you can't click on the link, copy and paste it to your browser manually.

CMT
https://cmt.eurtd.com/

Figure 5.7: Confirmation email following registration

The CMT menu bar

The menu bar, as shown in Figure 5.8, is permanently displayed and provides to the members easy access to:

- Their personal Dashboard, which is customisable.
- The list of groups and subgroups they can join.
- The list of CMT members, showing their public profile information.
- Contents, categorized by type of content you can access to (events, pages, etc.).
- A search bar.
- Their account settings and profile (see sub-section hereafter).
- Their inbox for sending and receiving messages to other CMT members.
- Notifications.
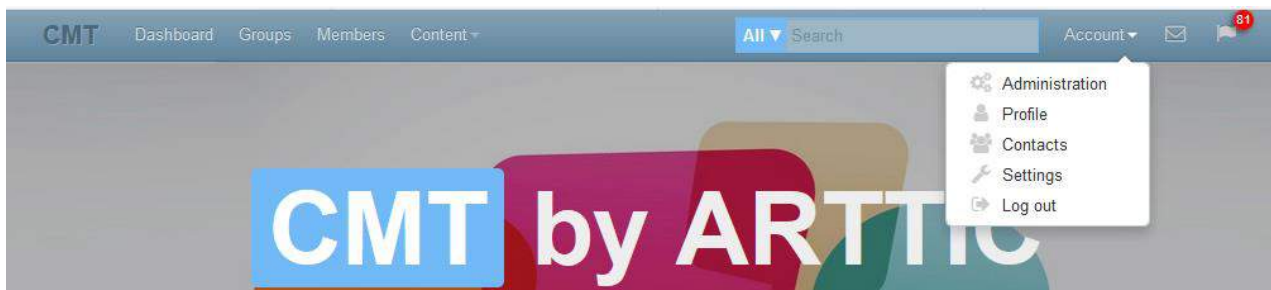
Figure 5.8: Screenshot of the CMT menu bar

Online profile creation

Once they have registered, they are given the possibility to easily create their profile. it should not be too complicated in that it will discourage visitors from becoming an active member. Therefore, the profile creation page is envisaged to request only the following details:

Table 5.2: Expected features of a CMINE online member profile
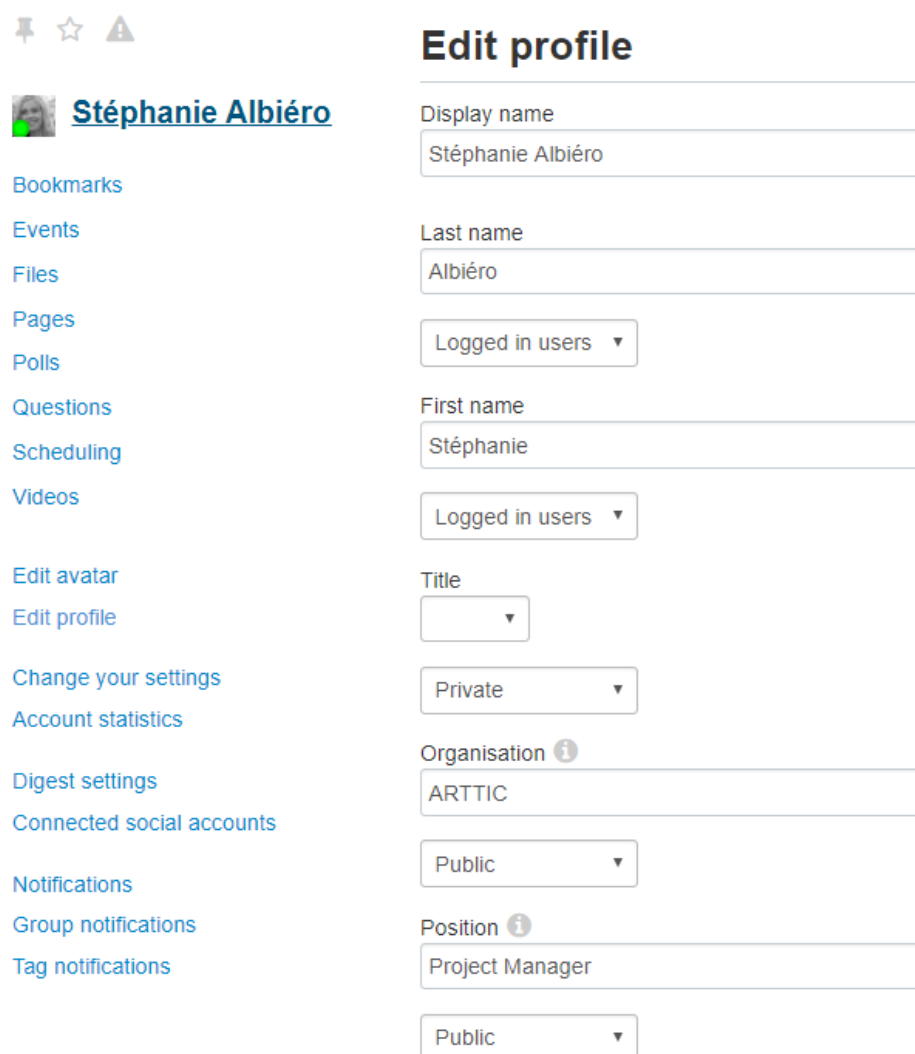
Compulsory	Optional
Display name	Title
Email address	Position
User name	Phone numbers
Password	Address details
Password (again for verification)	Website (personal or organization)
Last name	Category of stakeholder
First name	Area(s) of expertise
Organisation	Area of interest
Country	Brief description
	LinkedIn profile
	Picture

Currently, the expected features as required in the table above have all been implemented to the exception of the "stakeholder category", "thematic scope" and "interested in" fields which remain to be developed to match the needs of the CMINE.

In order to edit their profile, on the menu bar and under "account", the members can click on "Profile" to edit your profile (see Figure 5.8). For each data field can currently define their privacy settings to determine who will see this information:

- Private: Only the member can see his/her own entry.
- Contacts: Only the member's contacts can see his/her own entry.
- Logged in users: All users logged into the CMT can see his/her own entry.
- Public: The information is public and therefore can be seen to non-registered CMT people.
- Custom: Members can define who will see their entry by specific member(s) or group(s).

It has to be noted that in order to ensure the quality of the working group's page, the members should be required to share their first and last name as well as their field of expertise. Other than that, they should be free to set their privacy settings. It is not currently the case, as for now, members can make private or limit the visibility of all their information. This technical requirement should be enquired further in the next period to check its feasibility.

Figure 5.9: Screenshot of the "edit profile" function
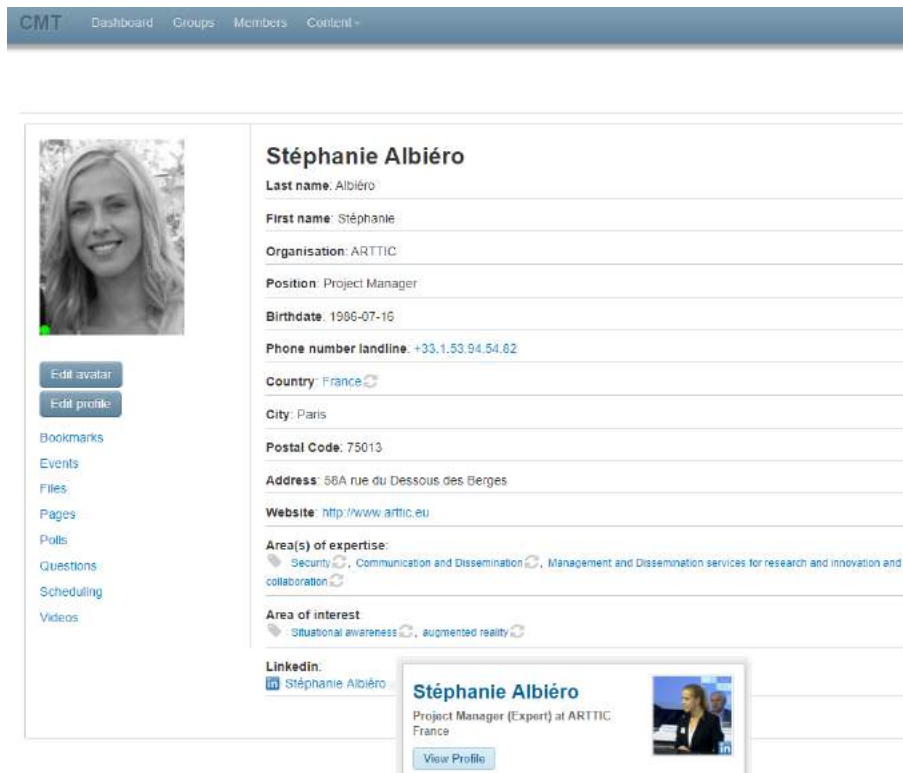
Figure 5.10: Screenshot of a CMINE online profile

Members and associated rights

The CMINE members are registered users. All CMINE members have created a user profile on the CMT. Currently, the members can have different roles in the CMT which give them different rights:

- **Members** can:
  o Modify their profiles.
  o Customise their user interface.
  o Control the information they receive (by choosing their widgets and setting-up notifications/digests).
  o Access the resources and take part in the discussion forums.
  o Can generate, depending on the parameterisation of the Virtual Structure, news for the other members of the group of members attached to the Virtual Structure (e.g. CMINE).

- **Group administrators** (administrators of Virtual Structures)
  o Have advanced member rights.
  o Can modify the structure of services.
  o Can customise the look and feel of the Virtual Structure.
  o Can parameterise whether the group of members related to the Virtual Structure is "open access" or "closed" (upon invitation only).
  o Can administer the user base.
  o Can create group news, events and threads of discussions.

- **System administrators**
  o Have group administrator rights.
  o Can manage everything related to Virtual Structures and in particular has the rights to create new virtual structures or to moderate them.

5.3.3.2.2   Structuring the CMINE

Based on the CMINE framework represented in Figure 5.4 of the present document, the CMINE overarching group has been set-up and acts from now on as an entry point to both the different thematic working groups

identified and the external cooperation platforms. In particular, it provides to all potential members interested in joining the Network:

- A definition of the CMINE and the added-value to join the Network.
- Further information on the objectives of each of the external cooperation platforms to direct the members to the ones matching their interests, profiles and expertise.
- User guidelines in order to guide the newly registered members in (i) editing their profile; (ii) joining a group; (iii) participating in a group and (iv) manage their notifications and digests. These user guidelines are complemented by a quick start guide downloadable from the homepage and available in Annex 3 of the present document.

As the three initial themes remain to be defined, the thematic working groups have not yet been created. However, the CMT allows to easily create and structure groups, through a widget drag and drop system. Therefore, as soon as the themes have been identified, the full structure will be implemented in a very limited amount of time. The external cooperation platforms have been created and the Terms of Reference to be accepted by the members when registering to those platforms can be found in Annex 4 of the present document.
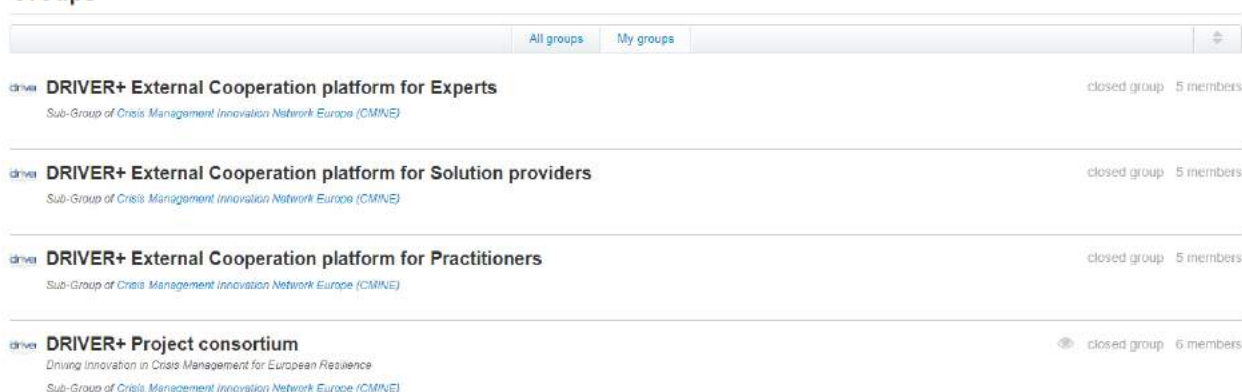
Figure 5.11: Screenshot of the current CMINE groups

Besides the external cooperation platforms, that are the most dominant elements of the CMT, the tool has been developed so as to include other features as outlined in Table 5.3. The core idea is to not overwhelm the members of the CMINE with too many features from the start. As noted above, the CMT will be kept rather simple at first and can potentially be enhanced over time depending on emerging needs or possible re-orientations of the CMINE. Following the validation interviews with the stakeholders, the features of the CMT might be adjusted and/or extended.

Functionalities

The current functionalities have been created and can be used to structure the thematic working groups in the CMT

Table 5.3: Current features on the CMT

Feature	Description
Activity	In the activity section of the working group page shows what has recently happened on the page (i.e. from the creation of a new profile (and thus, the joining of a new member), to new events that have been added, new comments that have been made in the discussion and files that have been added). The inclusion of an activity feed allows anyone to get a quick idea of how the workgroup has developed and what changes have been made.

Feature	Description
Bookmarks	The bookmarks section allows the CMINE members to pin websites, events or files to allow for easier and more efficient navigation through the platform.
Events	Both the Chairs and members (after approval of the Chair) can add events to the working group's pages. These events will be posted on the working group's page related to a specific subtopic and, therefore, the events that will be posted are rather specific. The event's page will provide a short description of what the event is about, where it will take place and a registration function. If relevant, a link to the event's webpage can be provided.
Files	Under the files section, the Chairs and members are able to upload files related to the workgroup. The Chair will upload the monthly forum overviews here and other files (overviews of closed discussions, manuals, best practices, etc.) can be posted here, too. Whenever a new file was uploaded, this will appear in the activity feed.
News	The news feature will allow the Chair and members to write a message to the entire workgroup. This can be used to welcome new members, to make visitors and members aware of a new discussion thread or to announce other 'newsworthy' developments or issues.
Pages	This functionality allows the members and the Chair to create wiki pages and to display them sorted by owner.
Polls	Polls can be launched to allow members to vote on a specific topic or challenge.
Questions/discussions	Through the questions/discussion functionality, the members can interact and exchange on specific topics. The Chair will manage these treads and will be given the possibility to launch new ones depending on the needs and interests of the members.

In addition to the above, the set-up of the following features foreseen to support the CMINE will be further enquired. The needs for additional functionalities will be further refined, based on the outcomes of the interviews to be conducted.

Table 5.4: CMT functionalities to be developed

Feature	Description
Knowledge factory	The purpose of the knowledge factory will be to provide qualified content from different sources (or pipes) to the members of a group.
Chat	The envisaged chat function should allow members to talk bilaterally without interference from other members or the Chair. This would enable the members to discuss issues, challenges or potential solutions in more a more private manner. Furthermore, it would reduce irrelevant one-to-one conversations in the discussion fora.

Besides the integrated features that are listed above, the CMINE platform will also provide the following documents on its pages:

Monthly forum overview as dissemination tool

While the notion of an open and inclusive discussion is at the core of CMINE, this strategy might lead to complex discussions where multiple topics are addressed by a variety of members. Such a development would lead to unclear discussion fora where too many issues are addressed at once. In order to avoid confusion and the loss of relevant knowledge, the Chair will create quarterly overviews in which the most useful and relevant ideas, comments and conclusions are summarised. This overview allows both members and visitors to remain up to date about the discussions in a particular workgroup as well as it helps to streamline the discussion. Moreover, whenever a certain thought receives much interaction from other users, the Chair can decide to create an additional thread for this topic so that discussions remain structured and easy to follow. The project team will establish detailed guidelines for drafting the monthly overview, which in general should not be longer than two pages.

The quarterly summaries will be published on the working groups' page and will be openly accessible to everyone. Therefore, the summaries can be used as a marketing tool to attract more visitors to the website; best practices, tips and food for thought will be readily available for interested actors. The fact that the summaries will provide an overview of the ongoing discussion enables a smooth transition for visitor to move on to become members. The summaries allow them to step into the discussion at any point in time. Furthermore, the quarterly summaries can be distributed both off- and online which enhances the dissemination opportunities of CMINE and the DRIVER+ project.

Welcome package

Although the intention is to keep the online platform rather simple and user friendly, a manual on how to use the platform will be developed and provided on the CMT. This manual will include detailed instructions on what the features of the online platform are and how a user can make optimal use of them. The manual will guide the visitor though the process of creating a profile and participating in the online discussions. Furthermore, the manual will elaborate upon the possibilities members have to communicate with the Chair.

Besides, the manual will include the house rules and 'netiquette' guidelines for the CMINE. These will outline which behaviour is tolerated and what is not. The adherence to these norms and values will be watched by the netiquette volunteer. Both DRIVER+ and CMINE deeply value the core principles of an open and democratic discussion. In order to ensure this, all members should respect the norms and values outlined in the welcome package.

As an initial step, a quick user guide has been developed to walk the members through the steps to access the CMT and to use its key features. It can be found in Annex 3 of the document.

Media package

On the CMT, a ready-to-use media package will be presented that stakeholders can use to further spread the word on both CMINE and the DRIVER+ project. This media package can be used by stakeholders when they are sharing their experiences with CMINE or the solutions that stem from it with a broader audience. The package will include a PowerPoint presentation, a logo, banners and an introductory text to CMINE.

This package can be used by anyone interested in sharing information about DRIVER+ and CMINE; it is not particularly targeted at media contacts.

5.3.4   Intellectual Property Rights considerations

The CMT is dedicated to managing and facilitating the exchanges in the community of practice in crisis management. It is powered by the Community Management Tool (CMT), a generic tool designed by ARTTIC for managing a number of different communities in a variety of projects and domains. The CMT development started before the DRIVER+ project and goes beyond the scope of the project itself. In terms of Intellectual Property Rights (IPR) the CMT is background of ARTTIC and will remain the property of ARTTIC and possible co-developers.

The CMINE Virtual Structure is the DRIVER+ specific instance of the CMT and is designed as a platform to support the Community initially facilitated by the DRIVER+ project. The Virtual Structure will be customised to the semantics, the look and feel, the structure and the settings of functionality required for the CMINE, taking into consideration sustainability options. The CMINE is a DRIVER+ project deliverable and hence project foreground. ARTTIC is in charge of developing and operating the CMT and CMINE Virtual Platform, including providing the user documentation and to ensure technical administration and maintenance.

In short, whilst the CMT is background to the CMINE, the CMINE Virtual Structure is project foreground. The CMINE Virtual Structure will be made available to the CMINE initiative throughout and beyond the duration of the DRIVER+ project. Following the end of the project duration, the CMINE Virtual Structure will continue to stay open.

Any individual providing directly or indirectly personal data remains the owner of his/her own personal information, independently whether this information is provided by himself or a third party. By joining the CMINE, the individual member makes his/her data available to enable the CMINE governance bodies and DRIVER+ to enter into contact within the limitations specified in his/her registration. The information about DRIVER+ events and activities will become the property of the DRIVER+ Consortium. The content uploaded to the CMINE Virtual Structure remains the property of its authors.

In summary, the IPR for the CMINE Virtual Structure are conditioned by:

- **The data protection legislation**: data of users remain their property.
- **Copyrights**: content uploaded to the CMINE Virtual Structure remains the property of their authors.
- **The DRIVER+ Consortium Agreement**: the CMINE Virtual Structure as a platform will be continued after the project, subject to a sustainability concept for the European Test-bed and Portfolio of Solutions, encompassing the CMINE Virtual Structure (the three being closely associated); this sustainability concept is in itself a forthcoming project result.

5.3.4.1   DRIVER+ Community Ownership

One of the elements that are crucial for the CoP to succeed is to create a sense of ownership among the members of the community (16). This creates a feeling of trust which is of encourages the members to speak freely and share their ideas without hesitation. Community ownership is equally important with regards to the sustainability of the platform since it is a crucial prerequisite for the continuation after the DRIVER+ project lifespan and its eventual transformation into a self-governed space (see section 7.1) on sustainability related aspects of the CMINE).

The right balance of freedom and guidance is required in order to create a sense of ownership of the community members. The nature of a CoP allows much freedom for the members of the community. Whereas a traditional community is steered by outer forces and has a predefined lifespan, a CoP exists as long as its members are actively engaged. Furthermore, membership to a CoP depends upon the members itself, they are fully enabled to decide when they wants to join the CoP and when to leave. This fluidity has vast benefits but it also creates risks for the CoP as it enhances uncertainty about the continuity of the community.

Through the Chair of the Chairs, the development and direction of the CoP is somewhat steered. However, as much influence is in the hands of the members, it is crucial to develop incentives for effective self-governing mechanisms to encourage the continuation of the CoP. Trust and ownership are closely related and, therefore, the following principles have been established in the CMT to encourage both aspects:

No anonymous posting

Participation in discussions requires visitors to create a member profile. The first- and last name registered in the profile will be displayed whenever a member posts, replies to a comment, endorses a comment, creates an event or undertakes any other form of action on the platform. Hereby, transparency is created around which actor plays which role in the community as well as it clarifies which actor has a certain opinion. Moreover, requiring visitors to create a profile in order to be able to engage in a discussion enhances the

level of trust in the community. It enables all members to see who has placed a certain comment and, thereby, they become known to the community. This strategy reduces the amount of offensive, inappropriate or unrelated comments and, thus, helps creating a better atmosphere in the CoP.

Strict stance on netiquette

Related to the aim of creating trust in the CoP is the compliance of the netiquette that is closely watched by the Chairs. In order for all members and visitors to feel welcome and valued in the CoP, it is crucial that all offensive and inappropriate comments are averted. This complies with the above-mentioned strategy of making the online profiles compulsory.

Give discussion members a sense of value

The sense of ownership is also closely related to feeling valued in the CoP. Once a member feels like he/she is contributing to the community in a valuable way and other members acknowledge this, the sense of ownership will be enhanced. Therefore, the Chair will point out valuable contributions both in the monthly summaries but also directly in the discussions. This can be done by either replying to the comment directly or by endorsing a specific comment. Moreover, fellow members can also endorse the comments they value most. It will encourage visitors to become members when contributions are explicitly valued. Furthermore, this system enhances the sense of unity within the community.

6. Linkages with DRIVER+ sub-projects and Community of Users

This section indicates how the CMINE will be (i) linked up with other DRIVER+ relevant sub-projects such as the Portfolio of Solutions and the Test-bed as well as with (ii) external initiatives as the Community of Users. As the CMINE aims to fulfil an umbrella function, it is crucial that the content and structure of the CMINE are with other related initiatives in the field of Crisis Management. To ensure the CMINE adds value to the already existing landscape of projects in the Crisis Management domain, the project team needs to identify, justify and explain its unique configuration by constantly comparing its objectives and purpose with other initiatives in the field. A first essential exercise hereby is to identify the synergies and cross-linkages within the various DRIVER+ sub-projects.

6.1 DRIVER+ internal linkages

Perhaps more important than creating linkages with already existing projects in the Crisis Management domain, it is crucial to ensure that the CMINE is interlinked with other DRIVER+ initiatives. While each DRIVER+ project has its own goal and role in the creation of the bigger picture, it is of vast importance to link the projects internally to create a more solid network and in other to enhance the sustainability of the individual projects.

Furthermore, once critical mass has been created around the DRIVER+ initiative, it is key to maintain these interested and active stakeholders and to make it easy for them to enhance their involvement by joining and/or making use of other projects and initiatives.

6.1.1 Test-bed as an 'operability check' of Post-CMINE solution

When one of the posted workgroup challenges (see section 5.3.2.5) has led to an idea for a solution which then has been developed by academia or industry, a possibility could be that this solution will be tested by using the DRIVER+ Test-bed software that will be developed as a subtask of the DRIVER+ project. This software allows different organisations to test their solutions jointly, which then helps them to address multi-faceted challenges that move beyond specific thematic areas or geographic scopes. If a solution which has been identified on the CMT would make use of this already established tool, it could significantly increase the chances of them being actually picked up and used by the industry because it would lower the in-house testing expenses.

#### 6.1.1.1 'CMINE certified' Portfolio of Solutions

The Portfolio of Solutions (PoS), developed in WP92 of the DRIVER+ project is inherently linked to the CMINE. The PoS will function as a catalogue of developed solutions that can be used by others elsewhere, will serve as an important information source for the CMINE members. The PoS will be directly accessible via the CMINE and, thereby, it allows CMINE members to see which solutions have already been developed and how they could potential benefit them in the challenges they face. The PoS is a crucial source of information for the Vote4Challenges. Comparing the challenges proposed with already existing solutions in the database will prevent duplication for and allow members to identify gaps.

However, the relationship with the PoS works two ways. Not only can the CMINE members access the PoS (as described above), solutions that have been developed as a result of the CMINE challenges will be able to be displayed in the PoS. This opportunity would significantly enhance the reach of the solution.

Once a solution initially stemming from the CMINE Vote4Challenges has been tested by the Test-bed and has been uploaded to the PoS, it will receive the 'CMINE solution certificate'. This label shows that the solution has been created on the CMINE platform and that the CMINE Chair of Chairs approves the solution. This additional certificate would not only enhance the credibility of the solution, it would also be useful for marketing purposes of the CMINE.

The lifecycle of a successful Vote4Challenges would look as follows:

Figure 6.1: Lifecycle of a solution in DRIVER+
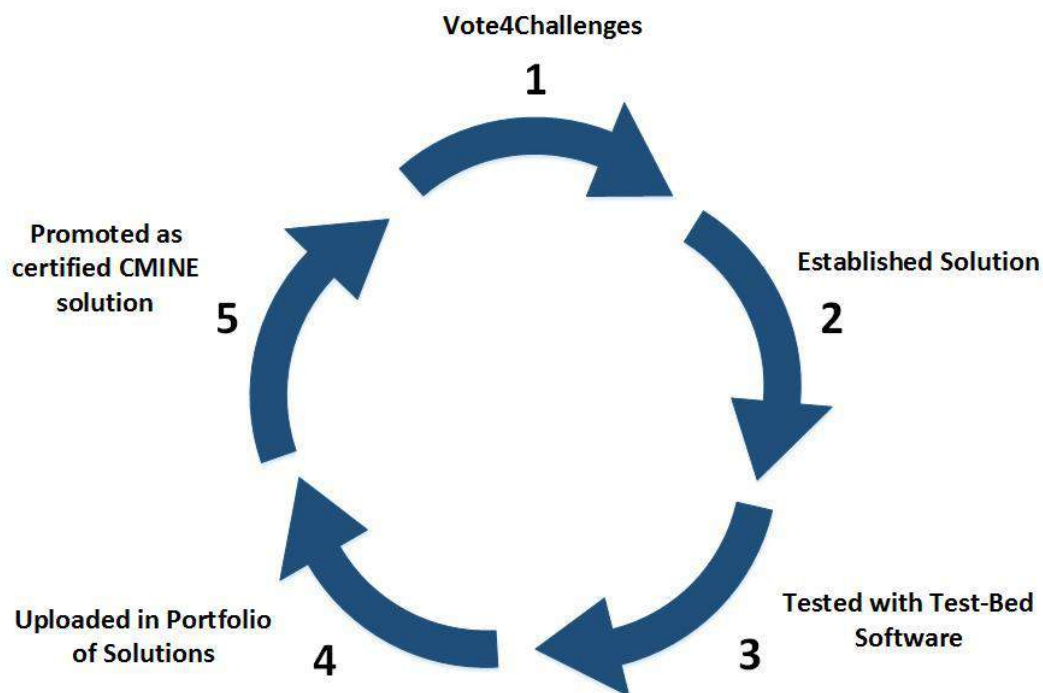
1. **Vote4Challenges**

The voting tool installed on the CMINE online portal allows members to propose a specific challenge they would like to see solved. The voting tool allows visitors of the platform to vote for the challenge they would like to see addressed in one of the discussion fora. Hereby, the challenge or constraint becomes subject to discussion by various stakeholders.

2. **Established Solution (Post CMINE)**

Once the challenge has been addressed thoroughly, those who are actively engaged in the discussion on the challenge will be able to intensify their communication and develop a solution that addresses the challenge or find industry partners who are able to develop the solution. This solution can come in the shape of a service, app, tool, etc.

3. **Tested with Test-Bed Software**

For those solutions that benefit from the testing facility of the Test-Bed, this DRIVER+ tool would be made available once the solution has been established. This allows for a thorough evaluation of the solution and, when deemed necessary, the solution can be adjusted.

4. **Uploaded in Portfolio of Solutions**

Regardless of the nature of the solution, it can be uploaded to the DRIVER+ Portfolio of Solutions. This platform allows the solutions to be presented as well as interested stakeholders are able to connect with the creators of a particular solution to exchange information.

5. **Promoted as certified CMINE solution**

Once a solution has been uploaded to the Portfolio of Solutions (and has been tested by the Test-Bed, if applicable) it will be awarded with the 'CMINE solution certificate' showing that the solution in question stems from a challenge presented on the CMINE platform and that the Crisis Management Community will be aided in addressing the particular challenge by using this solution.

6.2   Linkage with Community of Users

Primarily, the CMINE is inherently linked to the CoU as it constitutes one of the specialised communities that the CoU has under its umbrella. The CoU functions as an overarching umbrella in the Security domain and aims to connect the various sub-networks that currently exist. It aims to reduce fragmentation in the Security sector by linking existing networks and communities and by doing so, it aims to foster synergies and collaborations.
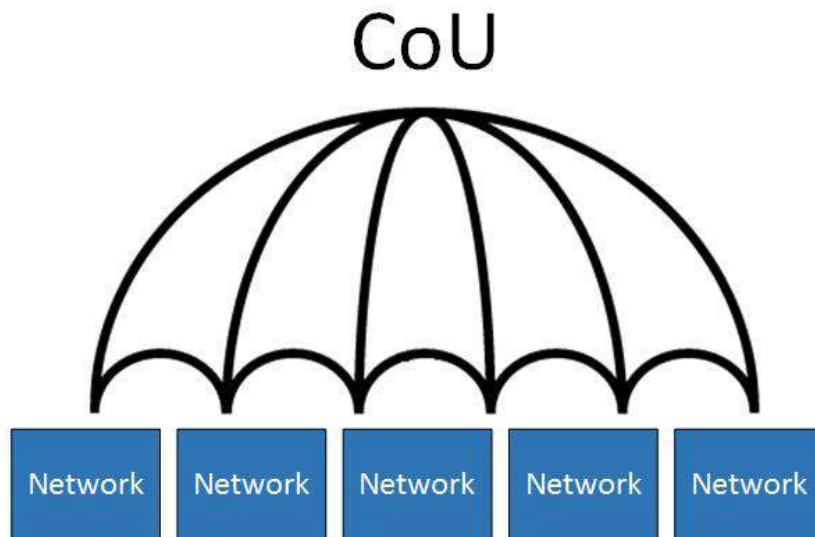

Figure 2.7 CoU umbrella

Furthermore, the CoU organises in-person meetings where experts are invited to engage in high-level discussions on a variety of topics related to the Crisis Management domain. During these meetings, pressing challenges and developments in the Crisis Management domain will be addressed. The project team will attend the CoU meetings and speak with stakeholders to understand what issues are currently thwarting the Crisis Management domain. The themes and challenges identified during these meetings will complement the findings from the explorative interviews with other potential members, these exploratory interviews and conversations will lead to a list of challenges that will lead the structure of the CMT.

Moreover, the CoU meetings will allow for the spreading of the word on the development of the CMT. Although the platform will not be launched before the CoU meetings will be held, the CMINE can still be promoted by presenting the idea, its aim and structure to the respective audiences. Through presentations, the target audiences can be introduced to the platform and informed about the next steps to be taken before the launch. This allows them to share any ideas or best-practices on CoP-building with the project team. The table hereafter provides an overview of which CoU meetings could be potentially relevant for the development of the CMINE.

Table 6.1 CMINE relevant CoU meetings

CMINE theme	CoU Meeting themes	Date
Health threats Human made disasters Multi-hazard	Chemical accidents Water Safety & Security Health Citizen awareness CBRN-e National CoU network	5 – 9 March
CIP Climate Related hazards	Disaster Risk Reduction Mainstream Communication, interoperability	4 – 8 June

CMINE theme	CoU Meeting themes	Date
Disaster Resilience Multi-hazard	Weather extremes Geological disasters Resilient cities Critical Infrastructure Protection	
Multi-hazard	Cyber Security and Crime Border security Radicalization Standardisation governance External Security Forensics and Explosives	19 – 23 November

7. Potential risk and mitigation strategies

This section identifies and outlines how the sustainability of the CMINE can be ensured and enhanced. Moreover, it addresses the foreseen risks and the related mitigation strategies.

7.1 Sustainability aspects

As the aim of the CMINE is to outlast the DRIVER+ project, it is crucial to ensure that the CMINE is able to operate independently after 2020. In order to achieve this goal, various elements that are key elements in enhancing the sustainability of the CMINE should be addressed.

Firstly, the needs of the members of the CMINE should remain at the core of the community. As a CoP's success and effectiveness is for a big part dependent on the input and engagement of its members, it is of utmost importance to ensure that the needs of these members are met adequately. However, as the needs and motivations of the members to join the CMINE might develop and change over time, it is crucial to continuously assess what needs to be done in order to keep the CMINE attractive. Therefore, the project team will continuously assess the needs of stakeholders, also after the CMINE has been launched. Not only will members be asked what they would need from the CMINE also other stakeholders that have not been involved in the CMINE yet (for whatever reason) will be approached to share why they have not joined yet at what would have to be changed in order for them to join. This constant reflection would enable the project team to shape and adjust the tools, features and rhythm of the CMINE according to the needs of the members. The Chairs will play an important role in this process as they are able to sense what could be improved on an everyday basis. In practice, this constant monitoring could mean that certain features could be removed if they are not used. On the other hand, new tools could be added and the frequency, nature and content of in-person meetings could be adjusted.

Secondly, the sustainability of the CMINE can be enhanced by ensuring and maintaining close links to other projects within and outside the DRIVER+ initiative. The connection between CMINE, the Test-bed and the PoS enhances the relevance of all three projects on the longer run. When tight connections between these three initiatives can be established, stakeholders would be more likely to move from using one initiative to another and, thereby, ensuring their sustainability (i.e. a CMINE member creates a solution, tests it in the Test-bed and posts it in the PoS).

Moving from the tight cooperation between the CMINE, Test-bed and PoS to the "CMINE solution certificate" would be a third way to enhance the sustainability of the CMINE. By awarding solutions with the label "CMINE solution" when it stems from the CMINE, the legacy of the CMINE is enhanced and continued. Once a variety of solutions have gone through the entire cycle and have been awarded with the "CMINE solution" label, the meaning and value of this certificate will become more widespread and respected.

7.2 Risks

It is crucial to analyse the potential risks of setting up an online platform in a certain way. By doing so, one can address these risks in the earliest stage possible. The current structure of the CMT carries a number of risks that will be outlined below.

1. **Financing after 2020.** The DRIVER+ project runs until 2020, until that time financing for the entire project and, thus, the CMT is covered. However, once the DRIVER+ project is finished, the CMT and CMINE will still need financial support in order to be maintained and remain operational.
2. **Heavy reliance on end-users.** The current setup of the CMT relies rather heavily on the input and interactions of the stakeholders. By doing so, the success of the platform lies in the hands of the end-users, while neither DRIVER+ nor the secretariat has much influence in shaping the outcomes of the platform. If stakeholders are less active on the discussion fora than expected, the outcome of the CMINE will be different from when users interact continuously.

3. **Maintaining interest in the platform**. It might be difficult to maintain the interest of end-users in the platform. Once the first set(s) of challenges have been addressed and the outcomes were less innovative or different than expected, it will be an interesting task to keep members interested and involved in the CMINE.

4. **Added value of the CMINE unclear**. As CMINE serves as an overarching umbrella network that aims to bring together already existing networks, it runs the risk that members of the established networks do not understand the value of joining CMINE. If the goal of the platform and the benefits that could come from it are not communicated adequately, the CMINE might partially lose its value.

5. **The needs received from potential end-users are vastly different from the proposed CMINE structure in the Strategy and Action plan.**
The proposed structure of the CMT is flexible and can be adjusted according to the findings of the interviews with potential end-users. However, due to this adaptive attitude, one runs the risk that the views and ideas of the end-users are inherently different from what has been proposed in the Strategy and Action paper. If the end-users argue that their needs, wishes and ideas are vastly different from what has been presented in the Strategy and Action Paper, a substantial revision of the structure is required.

6. **The envisaged features and tools for the CMT cannot be implemented**
The proposed structure of the CMT in the Strategy and Action Plan is fairly detailed and outlines a number of tools and features that are envisaged to be integrated in the platform. However, the CMT might not be able to provide all features that were mentioned in the proposed structure. Despite close liaising with ARTTIC, specificities of certain tools might not be in line with what was envisaged in the Strategy and Action Paper.

7. **The potential interview partners identified are not interested or available for interviews.**
As outlined in the Strategy and Action Paper, M47-M53 will be used to have explorative interviews with potential end-users and experts in online CoP building to further develop the proposed structure of the CMINE as well as to ensure the structure fits the needs of the potential end-users well. Relatively much weight will be placed on the input received from the interviewees as the end-user remains key in the development of the CMT. However, in using this strategy one runs the risk of becoming too dependent on the input of interviewees and, thereby, becoming vulnerable if only a small portion of the end-users are available for interviews.

7.3   Mitigation strategies

A preliminary assessment of the potential risks for the CMT allows one to provide an initial set of mitigation strategies to reduce the likeliness of occurrence and the impact of the risks. Based on the risks outlined above the following mitigation strategies have been set up:

1. **Financing after DRIVER+:** ARTTIC will host the CMT and, thus CMINE, up until 2020. Afterwards, ARTTIC will continue to carry the responsibility of maintaining and updating the technical aspects of the CMT as this tool has been specifically developed by ARTTIC. To ensure that ARTTIC will continue to take this responsibility, a Letter of Intent can be signed by both parties (ATTIC and DRIVER+) to agree upon the continuation of the CMINE platform after 2020. The sustainability of the platform is further being developed in more detail together with WP954 in the next project cycle (sustainability framework will be delivered by March 2018).

2. **Heavy reliance on end-users.** The current fragmentation of the Crisis Management domain shows that there is a need for a platform such as CMINE that connects relevant actors in the field. Therefore, when the engagement of the participants on the online platform drops, this might be the cause of a mismatch of topics and discussions presented on the webpage. Rather than assuming that the interest in the Crisis Management domain has dropped or that there are no more challenges to be solved, the CMINE should then, once again, consult the end-users about their needs and wishes and adapt the content of the CMT accordingly. If new issues or challenges have arisen that are not currently present on the online platform, adding the content might give new impetus to discussions and exchanges.

3. **Maintaining interest in the platform**. Through the Vote4Challenges, the interests and challenges faced by the end-users are able to be identified. The tool allows the end-users to actively engage in the content and direction of the CMINE and, thereby, it is attempted to maintain their interest. If the interest in the platform is indeed falling, the advisory panel could consider adding more features similar to the Vote4Challenges to enhance the interest of the end-users. Furthermore, new interviews or a survey with end-users could be initiated to re-assess their needs and to adapt the CMINE accordingly.

4. **Added value of the CMINE unclear.** Potential end-users might be confused by the different networks and initiatives that are currently out there. Therefore, it would be a great opportunity if we could integrate the idea of the CMINE in presentations and flyers that can be distributed during the CoU meetings in 2018. This would allow the CMINE to establish itself as a different platform than the CoU and elaborate upon the differences between the two initiatives. It is needed to emphasize how the CMINE is not "another network" but how it aims to connect existing initiatives.

5. **The input received from potential end-users is vastly different from the proposed CMINE structure in the Strategy and Action plan.**
Throughout the development of W953, the end-user of the CMT remains at the centre of attention. The goal of the CMINE is to provide an umbrella which connects existing goals and initiatives and to ensure the added value of the platform, it is crucial to understand the needs and wishes of the end-users. In order to reduce the risk outlined above, extensive desk research has been conducted to map which features are present on other platforms. Furthermore, literature on CoPs has been studied to familiarise oneself with the ideal structure and elements present in a CoP. By doing this, the risk that potential end-users suggest vastly different tools and features has been reduced. Furthermore, the CMT that will be the technical backbone of the CMINE has already been tested and used frequently by other online communities and, therefore, has been proven to successfully meet the needs of end-users.
Having applied these two strategies does not guarantee that the proposed structure of the CMINE matches the needs of the end-users completely. Therefore, ample of time and space has been reserved in the upcoming months of the DRIVER+ project to carefully analyse the input received from the end-users and to assess whether and to what extent they can be integrated in the proposed structure. The input of the end-users is perceived as highly valuable and, therefore, their suggestions will be taken into account seriously and if deemed relevant the proposed structure of the CMT might be adapted accordingly.

6. **The envisaged features and tools for the CMT cannot be realised.**
The CMT developed by ARTTIC is already up and running and, therefore, will be a leading factor in the design of the CMT. The features and tools developed and integrated by ARTTIC will serve as the backbone of the CMT and, therefore, close communication with ARTTIC is required about the specific features the CMT is able to offer. In order to avoid miscommunication about the tools that the CMT is able to deliver, frequent liaising with ARTTIC is foreseen in order to communicate the wishes on the structure as well as to speak about the possibilities and limitations from the side of the CMT. In the drafting of the proposed CMT, ARTTIC has been involved from an early stage on to assess the feasibility of the proposal as well as to present the features and tools that could possibly be integrated in the CMT.

7. **The potential interview partners identified are not interested or available for interviews.**
The Strategy and Action Plan presents a list of potential interviewees. These individuals or representatives of organisations have been identified based upon their expertise and professionalism. However, their identification does not necessarily mean they are available to speak about the CMINE initiative. If only a few interviews can be scheduled based upon the identified end-users outlined in the Strategy and Action paper, another look will be taken into the mapping document from which new interview partners can be identified. Furthermore, the CoU meetings that will take place in 2018 will allow for ample of opportunities to interview potential end-users too.

8. Way forward

Currently, the grand framework of the CMINE has been established and is documented with the present deliverable. Through desk research and literature review, the core principles of building a CoP have been identified and the strategy of building the CMINE has been created accordingly. On top of that, the initial structure with regards to the content of the CMINE has been presented. A preliminary list of themes has been proposed and will serve as the structure, along which the CMINE will be designed. As noted throughout this document the framework presented is a proposal and is subject to change. These changes and potential re-orientations will be presented in the next iteration of this document, to be released at M52 and M58. The final version will be released at M70 and will include the final version of the Strategy and Implementation plan for developing the CMINE. This plan will detail options on how to maintain the initiative after the end of the project. In the upcoming months, the project team and the partners involved in SP95 will be conducting interviews to verify and validate the proposed themes. Based on the findings of these interviews, the thematic structure of the CMINE might be altered. Furthermore, the CMT will be further developed and adapted to match the needs of the CMINE, based on the content of the present document and taking into consideration the results of the interviews. Additional information will be provided to report on the progress of the organisation of the 3rd edition of the I4CM, on the results of the first Policy-Research Dialogue roundtable and on the preparation of the first annual report to be released in 2019. This will be done on the occasion of the 4th edition of the I4CM, once more project results are made available. However, it has to be noted that the preparation of the latter has not yet started. The reason is that most of the resources have been invested at the restart of the project in establishing the CMINE framework and progressing on the tasks supporting its establishment (i.e. CMT, I4CM, Policy roundtables), as it sets the basis for the work to be conducted.

The tentative timeline for the launch of the CMINE is shown in Table 8.1.

Table 8.1 Launch of the CMINE - Way forward and tentative timeline

	M47	M48	M49	M50	M51	M52
Needs assessment of CMINE users						
Identify availability of potential end-users for an explorative interview	■					
Identify availability and interest of experienced CoP creators	■					
Conduct interviews with interested actors and analyse findings		■	■			
Create overview of members' needs and wishes for the CMT			■	■	■	
Adapt CMINE structure to members' suggestions					■	■
CMINE structure						
Define themes and subthemes of CMT				■		
Define challenges based on CoU meetings, desk research and interviews				■		
Further develop in-person component of CMINE				■		
Refine specifics and features of subtheme working groups			■			
Further develop governance strategy for CMINE	■	■				
Further develop strategy on sustainability	■					
Technical aspects CMT						
Identify the practical limitations and possibilities for the CMT	■	■				

	M47	M48	M49	M50	M51	M52
Identify potential difficulties in creating the CMINE						
Establish task division on management of CMINE until 2020 and thereafter						
Link to other (DRIVER+) projects						
Further develop link to Test-Bed						
Further develop link to Portfolio of Solutions						
Further develop link to CoU						
CoU meetings						
Attend CoU meetings to discuss themes and challenges with potential members						
Promote the CMT						
Deliverables						
Progress Report 2						

References

1. **European Commission - European Civil Protection and humanitarian aid operations.** http://ec.europa.eu/echo/what/civil-protection/mechanism_en. [Online]

2. **The United Nations International Strategy for Disaster Reduction (UNISDR).** European Forum for Disaster Risk Reduction. *http://bit.ly/2keZIGk.* [Online]

3. **UNISDR.** *The Sendai Framework for Disaster Risk Reduction 2015-2030 .* 2015.

4. **DRIVER+ consortium.** *D952.11 - Dissemination and Communication Strategy and Action Plan.* 2017.

5. **ARTTIC and al.** *D952.11 - Dissemination and Communication Strategy and Action Plan.* 2017.

6. **A Community of Users on Secure, Safe and Resilient Societies (CoU).** *Mapping EU policies and FP7 research for enhancing partnerships in H2020.*

7. *PreventionWeb.net.* **[Online]**

8. **DRIVER+ consortium.** *D934.10 - DRIVER+ taxonomy.* **2018.**

9. **Lave, J., Wenger, E.** *Situated Learning: Legitimate Peripheral Participation. .* **s.l. : Cambridge University Press, 1991.**

10. **Farrior, M.** *Best Practices for Building Online Communities between Researchers and Practitioners.* **2005 : s.n.**

11. **Wenger, E.** *Communities of practice: Learning, meaning, and identity.* **s.l. : Cambridge university press, 1998.**

12. **Etienne Wenger, Richard McDermott, and William M. Snyder.** *Seven Principles for Cultivating Communities of Practice.* **s.l. : Harvard Business School Press, 2002.**

13. **DRIVER+ consortium.** *D922.11 – List of CM Gaps.* **2018.**

14. **—.** *D952.16 - SP95 coordination report - 2.* **2018.**

15. **—.** *D912.11 – Procedures and themes of reference for the involvement of external stakeholders in DRIVER+ trials.* **2017.**

16. **https://skariphos.com/2017/05/03/creating-a-sense-of-ownership-in-your-online-community/.** *Skariphos.* **[Online]**

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[2]. 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.

Terminology	Definition	Comment
Best Practice	This encompasses the preferred actions in a specific type of situation to efficiently and effectively achieve a certain objective. Best Practice may be formalised in internal policy documents such as handbooks and standard operation procedures and could be based on one or several Lesson Identified/Lessons Learned approved by decision-makers.	Initial DRIVER+ definition.
Community building	Practices directed toward the creation or enhancement of community among individuals within a regional area (such as a neighbourhood) or with a common interest.	D934.16.
Community of Practice	An (online) platform that facilitates and fosters cooperation and synergies among Crisis Management professionals. A broad variety of stakeholders including practitioners, researchers, industry representatives and policy makers can exchange knowledge and best practices and initiate cooperation on Crisis Management topics.	
Crisis management	Holistic management process that identifies potential impacts that threaten an organization and provides a framework for building resilience, with the capability for an effective response that safeguards the interests of the organization's key interested parties, reputation, brand and value creating activities, as well as effectively restoring operational capabilities. Note 1 to entry: Crisis management also involves the management of preparedness, mitigation response, and continuity or recovery in the event of an incident, as well as management of the overall programme through	Source: ISO22300 (DRAFT 2017) 8.

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[2] 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.

Terminology	Definition	Comment
	training, rehearsals and reviews to ensure the preparedness, response and continuity plans stay current and up-to-date.	
Crisis Management taxonomy		Definition is still "under construction" and can be found online in the near future.
Gap	Gaps between the existing capabilities of responders and what was actually needed for effective and timely response.	Source: Project Responder 5
I4CM - Innovation for Crisis Management		Definition is still "under construction" and can be found online in the near future.
Lesson Learned	Lessons learning: process of distributing the problem information to the whole project and organization as well as other related projects and organizations, warning if similar failure modes or mechanism issues exist and taking preventive actions.	[ISO 18238:2015(en) Space systems — Closed loop problem solving management, 3.3]
Mitigation	Measures taken to prevent, limit and reduce impact of the negative consequences of incidents, emergencies and disasters; [limitation of any negative consequence of a particular incident - DRAFT 2017].	ISO22300 (2015) 4 [DRAFT 2017; 18]
Sustainability		Definition is still "under construction" and can be found online in the near future.

Annex 2 – I4CM teleconferences minutes

driver⁺
Driving Innovation in Crisis Management
for European Resilience

PREPARATION OF THE 3RD I4CM EVENT

TELECONFERENCE, 22/01/2018

MINUTES (as of 26/02/2018)

DRIVER+ project ■ Preparation of the 3rd I4CM event ■ Teleconference ■ 22/01/2018 ■ Minutes

Table of Contents

1.   General information

Name of the meeting	Preparation of the 3rd I4CM event
Type of meeting	Teleconference
Meeting date	22/01/2018 from 10:00 to 11:15 am CET
Type of document	Minutes
Document release date	26/02/2018 (please update the field)
Dissemination level of the document	Public (PU)
Related SP	SP95 - Impact, Engagement and Sustainability
Related WPs	WP953
Related Task (if applicable)	T953.4
Authoring Partner Organisation	ARTTIC
Author of the document	Marion Bonlieu (ARTTIC)

2.   Objectives of the meeting

In order to move forward with the organisation of the 3rd edition of the I4CM event, the purpose of this teleconference is to:

1.   Set up the Programme Committee
2.   Agree on the best suitable date to host the event
3.   Get feedback on the draft concept of the event
4.   Inform on the next steps

3.   Participants

Name	Organisation short name	Country	Attending/excused
Stéphanie Albiero	ARTTIC	France	Attending
Marion Bonlieu	ARTTIC	France	Attending
Jeannick Elleouet	ARTTIC	France	Attending
Michael Löscher	ARTTIC	Germany	Excused
Anna Ellinge Madar	ARTTIC	Israel	Excused
Rob Munro	ARTTIC	UK	Excused
Marcel van Berlo	TNO	The	Attending

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		Netherlands	
Marie-Christine Bonnamour	PSCE	Belgium	Attending
Esther Kähler	DIN	Germany	Attending
Adam Widera	WWU	Germany	Attending
Laura Birkman	Ecorys	The Netherlands	Attending
Christian Niermann	DLR	Germany	Attending
Konstanze Lechner	DLR	Germany	Attending
Piotr Tyczka	ITTI	Poland	Attending

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4.   Agenda

Time	Item	Lead
10:00 – 10:15	Set up the Programme Committee	Stéphanie Albiero (ARTTIC)
10:15 – 10:30	Best suitable date to host the event	Stéphanie Albiero (ARTTIC)
10:30 – 10:45	Draft concept on the event	Stéphanie Albiero (ARTTIC)
10:45 – 11:00	Next steps	Stéphanie Albiero (ARTTIC)
11:00 – 11:15	AOB	ALL

5. Meeting minutes

5.1 Set up the Programme Committee

As defined in DRIVER+ DOW, the Programme Committee should be composed of: the task leader (ARTTIC), the event hosts (ITTI, DIN and PSCE) and scientific coordinators (TNO, DLR and WWU). The task leader is mainly responsible for the logistic of the event, the hosts provide the knowledge of the country and therefore the core topics to be tackle, the other members are responsible for the scientific perspective.

The roles and responsibilities of the Programme Committee will be:

- To coordinate from an appropriate perspective (appropriateness and relevance)
- Identification and support in sourcing the speakers
- Evaluate the open call submission

Decision 1: The composition, roles and responsibilities of the Programme Committee have been adopted by task members.

5.2 Best suitable date to host the event

The 3rd I4CM was initially planned to take place together with Trial 1. However, as the latter will last 5 days it seems unlikely to organise the two jointly as the project partners, but also solutions providers and practitioners, will be busy throughout the week. Another identified option was to organise it back to back with Dry-run 2. However, it will take place in April, too early to prepare the event and secure relevant speakers and participants. For these reasons, another emerging option would be to organise the I4CM in September 2018, which will give the opportunity to present the outcomes of Trial 1.

Action 1: ARTTIC to send a doodle poll to task members to agree on a date in September 2018 for the 3rd I4CM

5.3 Draft concept of the event

The event would last 2 to 2 and a half days, for an attendance of 300 participants, in Warsaw.

Action 2: ARTTIC to establish the budget for the event

The topics could focus on:

- Standardisation

Action 3: DIN to check if it is possible to postpone the Workshop on standardisation, initially planned in June, to September and to examine what could be the negative impacts?

- Presentation of Trial 1 results
- Social innovation, Responsible Research and Innovation

As it is a local event, regional issues and other topics of interest could be raise. A way forward to Trial 2 should also be considered.

Action 4: ARTTIC to set up an open page on the OCP for the organization of the 3rd I4CM workshop

Action 5: All to subscribe to the 3rd I4CM page on the OCP and answer the different questions and polls.

The aim of the event is to contribute building a monumentum/shared understanding through the organisation of an annual event focusing on Crisis Management topics, allowing addressing issues of

common interest, to develop synergies between initiatives, and to discuss the research roadmap for Horizon 2020 and beyond.

The objective of the event is in first place to allow local/regional practitioners and solution providers to meet and exchange on best practices and lessons learnt, while providing projects/initiatives with an opportunity to increase their visibility and impact in and to liaise with any interested stakeholders, including organisations developing similar projects in other regions of the world.

The idea is also to liaise with the EU level, especially, DG HOME's Community of Users initiative to ensure the event mirror the EU level event and provide added value. Although well-known events focusing on Security Research already exist, an occasion able to bring together practitioners, Crisis Management experts, solution providers and researchers from a specific region, but also from both within and outside of the European Commission programmes is still lacking. The Secure Society programme is an ideal framework to ensure that the research and actions funded through Europe public funding achieve a wider impact beyond the academic world, are fully benefiting the practitioners, and are nourished by projects external to the European Commission framework.

Action 6: Ecorys to upload on the OCP the themes to be addressed by the CoU in June and November 2018

<u>How the event could look like?</u>

From the experience of the first two I4CM events, *interactivity* is key to be successful.

Day 1 could be the "I4CM formal conference part", held at an European Commission official venue and be formally opened by an official from Poland or European Commission representative. There would be both bottom-up and top-down session with some mixed ones, where policy makers and initiatives and projects would be around the table to confront their views.

Day 2 could be the "I4CM off part", held at another venue. There would be hands-on sessions with roundtables and a BarCamp, where attendees could present their CM related ideas, activities and solutions, could be organized to close the event. A marketplace would be central to the event, allowing practitioners to discover innovative Crisis Management solutions.

Another idea is to organize an "Open call winners jump on stage session": the winners of an open call could be awarded with the possibility to be part of a dedicated session on the main stage where they could introduce their project with a space to organize activity. In this case, the proposals could be evaluated by the Programme Committee and ranked following specific criteria (like relevance to Crisis Management, speaker's potential, originality). This could also be made as a parallel workshop session organized by another project.

Action 7: WWU to upload on the OCP examples of event formats

<u>Who are the main target audience?</u>

Four main target participants have been identified:

- Practitioners
- Solution providers
- Research Community
- Policy makers

As practitioners represent the main target of the event, there is a need to look at what they are looking for and what are they comfortable with.

5.4 Next steps

- Decide on next teleconference to report on the progress

Action 8: ARTTIC to circulate a doodle to schedule next teleconference

- Create a group on the Online Community Platform (OCP) and invite Programme Committee to further discussion on the concept and themes of the event
- Programme Committee to answer the Poll available on the OCP for the most suitable week to organise
- Upload on the OCP the themes to be addressed by the CoU in June and November 2018
- Upload on the OCP examples of event formats
- Upload on the OCP the presentation used during the teleconference

Action 9: ARTTIC to upload on the OCP the presentation used during the teleconference

- Develop the 2-page concept integrating all comments received during the teleconference

Action 10: ARTTIC to develop the 2-page concept paper

- Benchmark and contact venue

Action 11: ARTTIC and ITTI to find venues for the event

- Budget
- Prepare the save the date

Action 12: ARTTIC to elaborate a first version of the Save the date

6. Table of Actions

DRIVER+ project ■ Preparation of the 3rd I4CM event ■ Teleconference ■ 22/01/2018 ■ Minutes

7. Table of Decisions

PREPARATION OF THE 3RD I4CM

TELECONFERENCE, 13/02/2018

MINUTES (as of 27/02/2018)

DRIVER+ project ■ Preparation of the 3rd i4cm ■ Teleconference ■ 13/02/2018 ■ Minutes

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1.   General information

Name of the meeting	Preparation of the 3rd i4cm
Type of meeting	Teleconference
Meeting date	13/02/2018 from 11:00 to 12:00 CET
Type of document	Minutes
Document release date	27/02/2018 (please update the field)
Dissemination level of the document	Restricted (RE)
Related SP	SP95 - Impact, Engagement and Sustainability
Related WPs	WP953
Related Task (if applicable)	T953.4
Authoring Partner Organisation	ARTTIC
Author of the document	Marion Bonlieu (ARTTIC) Jeannick Elleouet (ARTTIC)

2.   Objectives of the meeting

In order to move forward with the organisation of the 3rd edition of the I4CM event, the purpose of this teleconference is to discuss about:

- The best suitable date and venue to host the event
- Get feedback on the draft concept of the event
- Inform on the next steps

3.   Participants

Name	Organisation short name	Country	Attending/excused
Stéphanie Albiero	ARTTIC	France	Excused
Marion Bonlieu	ARTTIC	France	Attending
Jeannick Elleouet	ARTTIC	France	Attending
Michael Löscher	ARTTIC	Germany	Excused
Anna Ellinge Madar	ARTTIC	Israel	Attending
Rob Munro	ARTTIC	UK	Excused
Peter Petiet	TNO	The Netherlands	Attending
Jean de Preter	PSCE	Belgium	Attending

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Joao Diaz	PSCE	Belgium	Attending
Esther Kähler	DIN	Germany	Attending
Rene Lindner	DIN	Germany	Attending
Adam Widera	WWU	Germany	Attending
Nicola Rupp	WWU	Germany	Attending
Laura Birkman	Ecorys	The Netherlands	Attending
Christian Niermann	DLR	Germany	Attending
Konstanze Lechner	DLR	Germany	Excused
Piotr Tyczka	ITTI	Poland	Attending

5.   Meeting minutes

5.1   Report on actions from past meeting

This meeting started with a review of last meeting actions list (see table below).

#	Partner responsible	Description	Status
Action 1:	ARTTIC	To send a doodle poll to agree on a date in September 2018 for the 3rd I4CM	DONE
Action 2:	ARTTIC	To establish the budget for the event	On going
Action 3:	DIN	To check if it is possible to postpone the Workshop on standardisation, initially planned in June to September and to examine what could be the negative impact	DONE
Action 4:	ARTTIC	To set up an open page on the OCP for the organisation of the 3rd I4CM workshop	DONE
Action 5:	All	To subscribe to the 3rd I4CM page on the OCP and answer the different questions and polls	On going
Action 6:	ECORYS	To upload on the OCP the themes to be addressed by the CoU in June and November 2018	On going
Action 7:	WWU	To upload on the OCP examples of event formats	On going
Action 8:	ARTTIC	To circulate a doodle to schedule next teleconference	DONE
Action 9:	ARTTIC	To upload on the OCP the presentation used during the teleconference	DONE
Action 10:	ARTTIC	To develop the two pages concept paper to be included in D953.11	On going
Action 11:	ARTTIC/ITTI	To find dates and venues for the event	On going
Action 12:	ARTTIC	To elaborate the first version of the Save the Date	On going

Ecorys will upload after the meeting on the OCP the themes to be addressed by the CoU in June and November 2018

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5. Meeting minutes

5.1 Report on actions from past meeting

This meeting started with a review of last meeting actions list (see table below).

#	Partner responsible	Description	Status
Action 1:	ARTTIC	To send a doodle poll to agree on a date in September 2018 for the 3rd I4CM	DONE
Action 2:	ARTTIC	To establish the budget for the event	On going
Action 3:	DIN	To check if it is possible to postpone the Workshop on standardisation, initially planned in June to September and to examine what could be the negative impact	DONE
Action 4:	ARTTIC	To set up an open page on the OCP for the organisation of the 3rd I4CM workshop	DONE
Action 5:	All	To subscribe to the 3rd I4CM page on the OCP and answer the different questions and polls	On going
Action 6:	ECORYS	To upload on the OCP the themes to be addressed by the CoU in June and November 2018	On going
Action 7:	WWU	To upload on the OCP examples of event formats	On going
Action 8:	ARTTIC	To circulate a doodle to schedule next teleconference	DONE
Action 9:	ARTTIC	To upload on the OCP the presentation used during the teleconference	DONE
Action 10:	ARTTIC	To develop the two pages concept paper to be included in D953.11	On going
Action 11:	ARTTIC/ITTI	To find dates and venues for the event	On going
Action 12:	ARTTIC	To elaborate the first version of the Save the Date	On going

Ecorys will upload after the meeting on the OCP the themes to be addressed by the CoU in June and November 2018

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6. Table of Actions

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Action 8: ARTTIC to invite SRC PAS/ SGSP on the OCP and encourage them to raise relevant national/regional topics

ARTTIC proposed to draft a Survey to be to be sent to ITTI's network to get some input on regional and national issues to be addressed.

Action 9: ARTTIC to draft a Survey and arrange a call with ITTI to finalize it.

5.4 Next steps

In addition to the Actions listed above:

- Decide on next teleconference to report on the progress

Action 10: ARTTIC to circulate a doodle to schedule next teleconference

- Develop the 2-page concept to be include in D953.11

Action 11: ARTTIC to develop the 2-page concept paper

- Prepare the save the date
- Prepare List of tasks

Action 12: ARTTIC to elaborate a first version of the Save the date

5.2   Best suitable date and venues to host the event

The team expressed through the Poll their preference for the 3rd week of September.

Arttic started to investigate dates and venues. 14 venues have been contacted. The main issue is the venues' availabilities. First conclusions were presented, especially an highlight on the Copernicus Conference Centre, only available the 03-04.09.2018.

Action 1: ITTI to organize a visit at the KCC (Arttic to forward contact details)

With the regard to the dates, TNO commented that the GA meeting will surely be held jointly to the I4CM and concluded the following:

- In week 3 (18/19/20) or week 4 (25-26-27) it is very likely that the "1st Year Review meeting" with the Project Officer and the Project Reviewers will be held. The Project Technical Coordination and the SP-leads would have to prepare this Review meeting and be present.
- Moreover, the Trial 2 will take place in October (Valabre). This will highly likely require quite some (last-minute) preparation as well.

Therefore, TNO proposed 1st week Sept (4-5-6 Sept) or 2nd week Sept (1-12-13) to prefer to organize the GA & I4CM.

A disadvantage of the first week of September has been raised: too closed to summer holidays and could be a problem for attendance and participation.

Action 2: ARTTIC to find date and venues

Action 3: ARTTIC to ask SRC PAS (Joanna/ Jakub) for a suitable location

5.3   Draft concept of the event

The I4CM event would last 2 to 2 and a half days, for an attendance of 300 participants, in Warsaw.

With the addition of the GA (1 day / ~100 pax), we should plan a 3-days event.

A possible timetable can be:

- Start Tuesday afternoon the GA (with or after lunch), end the next morning
- Start Wednesday afternoon the I4CM (with lunch), end on Friday afternoon
- On Thursday afternoon, include a joint session with the CEN TC on standardisation (in coordination with DIN).

Action 4: ARTTIC/DIN to coordinate and include a joint session with the CEN TC on standardisation

Action 5: ARTTIC to establish the budget for the event

The topics could focus on:

- Standardisation

Action 6: ARTTIC to inform the PMB on the MS42 delay

- Presentation of Trial 1 results
- Social innovation, Responsible Research and Innovation
- Sustainability

As it is a local event, regional issues and other topics of interest could be raise. A way forward to Trial 2 should also be considered.

2 main questions have to be answered. What are the main regional/national issues that could be addressed on the occasion of the 3rd I4CM in Warsaw? What should be the themes/topics to be addressed?

Action 7: All to subscribe to the 3rd I4CM page on the OCP and answer the different questions

Annex 3 – CMT Quick User Guide

CMT by ARTTIC

A professional tool to support communities in both the online and the physical world

Quick Start Guide
Understanding the how and why of the community management tool

Welcome to the Community Management Tool (CMT).

The CMT is a platform developed by ARTTIC to facilitate communication and information exchange between the members of a project community, particularly in the context of innovation uptake. This guide walks you through the steps to access the CMT and to use its key features.

DRIVER+_CMT User Guide_08022018

1 What can the CMT do for me?

Whether you are a project partner, a stakeholder or simply interested in following the research topic, the CMT is designed to help you engage with the project and other stakeholders. You can follow project developments, be aware of upcoming events, and engage in discussions on larger issues related to the project. In this way, the CMT creates a greater community around a topic and supports the uptake of project results.

The CMT facilitates:

- Invitations and registration to project events
- Keeping up with related news / press releases
- Initiating discussions on specific issues
- Sharing documents
- Sharing knowledge through dedicated informational pages, tutorials or thematic questions

The CMT complements existing tools set up for the project and also publically available tools. It is designed to be interactive for a larger public, while being customisable and controlled by projects. The CMT is not:

- SharePoint: the focus is on discussing ideas, meetings and interacting with other people sharing a common interest
- A public website: this is a dynamic platform with content provided by the community, not a static showcase with one provider
- A Facebook page: the focus is on ideas, groups, events and news, not on individuals
- Twitter: we have more than 140 characters to fully express opinions and arguments
- LinkedIn: it is a platform to register to events and much more

The CMT is linked to social media:

You can register to the CMT through your LinkedIn account

You can display a custom search on Twitter

2 How to register

2.1 You have received an email invitation to join the CMT

Click the link provided in the invitation.
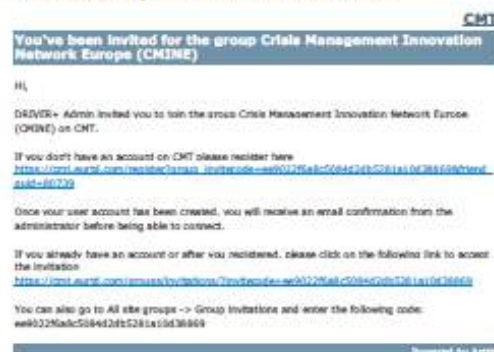
You can also register even without a specific invitation by using this link: https://www.eurtd.com/cmt/register/?_elgg_ts= 1490780961&_elgg_token=p-EIZBfoAAmilrDRonRcgA

2.2 Register

Complete the form to register and click "register" to save your information[1].

Tip: You can register through your LinkedIn account and the information already existing in LinkedIn will be imported.

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[1] Your data will be treated with confidence, in accordance with the European Regulation on Data Protection and the respective national rules. The database is hosted in France and, in accordance with the French 1978/01/06 law, the data collection

file has been declared to the French Administrative Authority (CNIL) under the Declaration n° 1620342 v0. See also the terms of service.

DRIVER+_CMT User Guide_08022018

Register

Display name*

Email address*

Username*

Password*

Password (again for verification)*

Last name*

First name*

Country*

☐ I have read and accept the Terms of Service*

Register

Items marked with a * are mandatory

2.3 Account activation

You will receive an email confirmation from the administrator that your account has been activated. You can now log on, browse the CMT and join communities of interest to you.

CMT Account Activated

Hi DRIVER+ Admin,

Your account has now been activated.

https://cmt.world.com/

2.4 Explore the CMT Homepage

Sign up!

Sign up today and connect with a wide-range of professionals to meet, collaborate & co-invent the future of your community.

Welcome to the CMT

Discover this new collaborative tool to support professional communities

To guide you through your first steps on the CMT, you will find a quick start series that will give you a brief overview of the community tool and its main features.

More detailed information will become available soon.

Latest CMT News

News Upgrade of the CMT
by DRIVER Admin on August

The CMT has evolved to help you better manage your communities

Latest CMT Groups

How-to / Creation of a (sub-)group

VICTORIA

EU-AIMS

DRIVER+_CMT User Guide_08022018

2.5   The CMT menu bar

The menu bar, shown above, is permanently displayed and provides access to:

- Your Dashboard, which is customisable
- The list of CMT groups (communities) you can join
- The list of CMT members, showing their public profile information
- Recent public content, categorised by type
- A search bar
- Your account settings and profile
- Your inbox for sending and receiving messages
- Your notifications

3 How to use the key features of the CMT

3.1   Edit your profile

On the menu bar, under Account, click on Profile to edit your profile.
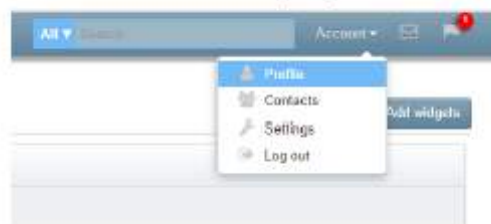
Click **Edit avatar** to add a photo to your profile.
Click **Edit profile** to complete your profile. For every data field you need to define your privacy settings to determine who will see this information:

- Private: Only you can see your entry
- Contacts: Only your contacts can see your entry
- Logged in users: All users logged into the CMT can see your entry
- Public: All users see your entry
- Custom: You can define who will see your entry by specific user(s) or group(s)

DRIVER+_CMT User Guide_08022018

3.2 Join a group

Click on Groups on the CMT menu bar. You will see a list of groups and you can search for a particular group. Click on the group's name. In the case of public (open) groups, click on Join Group and you will immediately become a member of the group. In the case of private (closed) groups click Request membership. Your request will be handled by the group administrator who will confirm or decline your membership. You can also click on Group invitations if you have been invited by the group owner to join a specific group.


All external stakeholders interested to cooperate with DRIVER+ and to contribute to its activities are asked to register on the project's dedicated platforms for external cooperation, which are sub-groups of the Crisis Management Innovation Network Europe (CMINE):

- DRIVER+ External Cooperation platform for Experts
- DRIVER+ External Cooperation platform for Practitioners
- DRIVER+ External Cooperation platform for Solution providers

DRIVER+_CMT User Guide_08022018

DRIVER+ Project consortium is a private (closed) sub-group intended for the members of the DRIVER+ consortium, dedicated to the communication regarding project internal matters concerning of the consortium members.

3.3 Customise your Dashboard
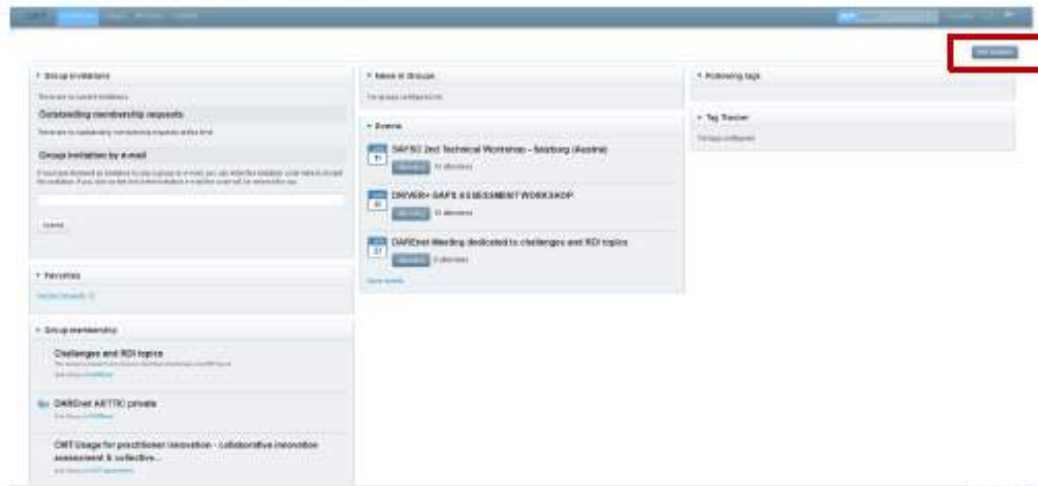
The CMT Dashboard functions as your customised homepage, showing the latest community content of interest to you.

To customise your Dashboard, choose the widgets[2] you want by clicking on Add widgets. You can further customise the widgets (setting the number of items to display, etc.) and move the widgets around on you Dashboard using drag and drop. Not all widgets show below may be enabled in all groups.

The Dashboard widgets provide a global preview of accessible content on the CMT:

- Activity: Display latest activity
- Bookmarks: Display your latest bookmarks
- Contacts: Displays some of your contacts
- Content by tag: Find content by a tag
- Events: Show upcoming events
- Favorites: Shows your favorite community pages
- Files: Showcase your latest files
- Following tags: Shows the tags that are being followed

- Group activity: Shows the activity of a group in a widget
- Group invitations: Shows the outstanding group invitations for the current user
- Group membership: Display the groups you are a member of on your profile
- Latest discussion: Shows the latest discussions
- Messages: Shows your latest messages
- News in Groups: Shows latest news from various groups
- Pages: This is a list of your pages
- Profile Completeness: Show the profile completeness
- Questions: You can view the status of your questions
- Start a discussion: Quickly start a discussion in a selected group
- Tag Tracker: Find content based on user provided tags
- Twitter search: Display a custom search from Twitter

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[2] A widget is a piece of software on a web page to show the user changing information of a particular type in a small area of the computer screen.

DRIVER+_CMT User Guide_08022018

3.4 Participate in a group
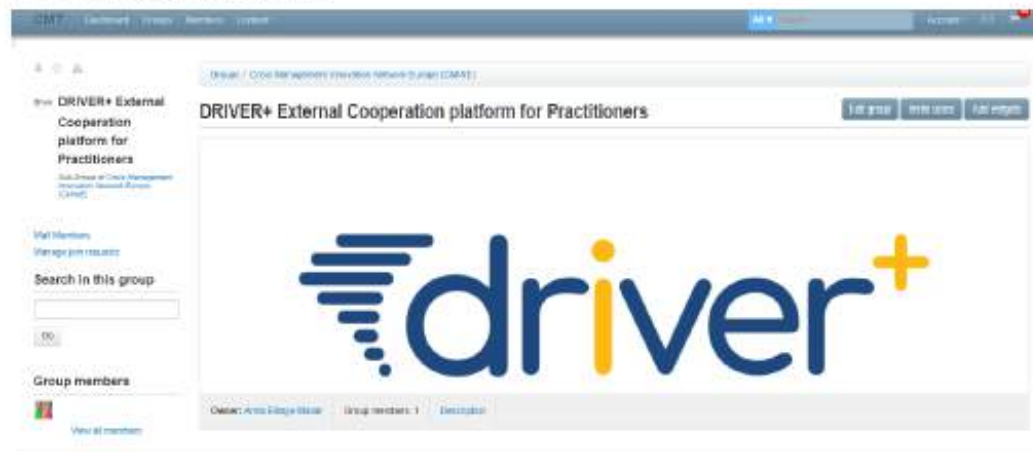
News and events can only be created by a group owner or administrator. All members can create pages, discussions, files, bookmarks and tweets which are accessible to the group or to specific members defined by the content creator.

Once you have become a member of a group you can:

- Read and comment on news of this group
- Confirm attendance to any group events
- View all pages of the group and add a new page. Pages contain rich text and can be commented by other members. The changes made are registered in different versions.
- View all group discussions and add a new discussion
- View all files and add a new file. Files can be downloaded and commented on by other members.
- View all bookmarks and add a new bookmark. Bookmarks are hyperlinks with a title, description and tags. Bookmarks can be commented on by other members.
- View all questions of this group and submit questions to the group
- View all related groups and sub-groups
- View all group activities

4 Add a contact from the list of CMT members

Contacts are CMT members with whom you can communicate or share content directly. For example when you create a page or upload a file you can give access rights to a specific contact only. Click on the name of the person that you want to add to your contacts list. You will now see the public profile of the person. Click on Add contact to add the person to your list. You can also search for a member using the search form.
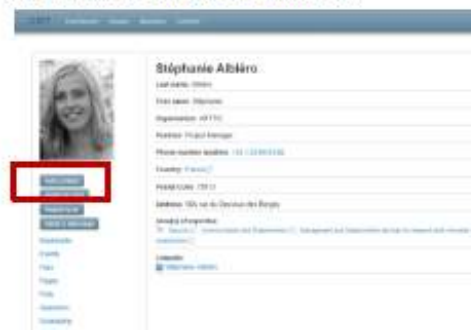
Annex 4 – External Cooperation Platforms – Terms of Reference

DRIVER+ External Cooperation Objective

To guarantee that the DRIVER+ project answers well to the real needs of practitioners in the area of Crisis Management, and that the most innovative and relevant solutions available are taken into account, a wide involvement of external stakeholders is necessary. In addition, the (early) involvement of external stakeholders in the project will contribute to the sustainability of its main tangible results. External cooperation is thereby considered as one of the key success factors of DRIVER+.

DRIVER+ External Cooperation Activities

The focus and the major efforts with respect to external cooperation in DRIVER+ are directed towards the planned Trials and the Final Demonstration. However, external cooperation opportunities with individuals, organisations, initiatives and related projects will be explored on various other levels, and is intended to be realised for many activities throughout the project duration, e.g. for;

- Innovation 4 Crisis Management (I4CM) events and the Final Conference
- Policy-Research Roundtables
- External cooperation in the preparation of technical documents
- Sustainability Plans
- Reference document "Crisis Management across Europe"
- Standardisation deliverables
- External cooperation in the development and/or provision of services
- DRIVER+ Test-bed
- DRIVER+ PoS and CMT

The consortium decided to assign a significant budget to the cooperation with project-external stakeholders, which is foreseen to provide administrative and financial support to external stakeholders contributing to DRIVER+.

DRIVER+ External Cooperation Members and their Role

The consortium seeks to work together with the followings groups that are in the main focus for external cooperation in DRIVER+.

Practitioners being end-users of potentially useful solutions supporting the preparation of the Trials with sharing their operational needs, and helping with successfully conducting the Trials and evaluating the Trials and the trialled solutions.

Solution providers from industry, SMEs and research having developed innovative solutions that contribute to closing existing gaps in Crisis Management and offering their solutions to the project's trialling activities to showcase them to interested practitioners.

Policy makers from public bodies such as EU Directorate Generals and procurement agencies, governance of Crisis Management centres, funding agencies, politicians, department directors, etc. for whom the results of DRIVER+ may be of particular interest and relevance and whose involvement allows DRIVER+ to better tailor its results to the specific conditions and policy developments (e.g. within DG ECHO / ERCC).

In addition, distinguished experts on various aspects of Crisis Management will be recruited from the above groups to support DRIVER+ with their specific knowledge and expertise, in particular with respect to operational and strategic/political challenges, specific technological requirements, challenges related to regulations and standardisation, and challenges related to evaluation processes.

Prerequisites for stakeholders joining DRIVER+ activities

Motivation

While there are mechanisms in place for administrative and financial support for external stakeholders (see 7.), including the reimbursement of costs directly borne from the participation in DRIVER+ activities, in most of the cases cannot offer any remuneration for time invested in the project. The benefits from participation should thereby be sufficient to motivate dedicated and timely contributions.

Availability

In addition to motivation and interest the external participants must have the necessary resources and availabilities to be able to effectively contribute to the project. DRIVER+ will try to take the calendars of external stakeholders into account and provide for flexibility, but the overall project planning cannot be revised. Hence, when concrete contributions from external stakeholders have been planned, the contributors are asked to ensure the availability of the agreed resources.

Registration and the Crisis Management Innovation Network Europe (CMNIE)

External stakeholders interested in cooperating with DRIVER+ are asked to register on the DRIVER+ External Cooperation Platforms for practitioners, solution providers or policy makers. During the registration process, the user will be asked for basic background information and his/her interest in Crisis Management to create a meaningful user profile.

As a forum for communication and collaboration, DRIVER+ will foster the establishment of the Crisis Management Innovation Network Europe (CMNIE). In order to provide a platform and facilitate the communication within the CMNIE an Online Communication Platform (OCP) will act as the virtual "meeting place" for the members to interact and share information, experience and best practices. With registration to the DRIVER+ External Cooperation Platforms, the user automatically will be granted access to the CMNIE.

Declaration of Consent

Whenever information is collected from project external participants during an activity, a consent form must be signed. By accepting the present terms, the external stakeholder approves that his/her input may be used in the project for further development, as well as possibly included in project deliverables, reports and other material. Furthermore, by agreeing to the present terms, the external stakeholder accepts to receive the DRIVER+ newsletter. Considering that DRIVER+ is very much built on the contributions of external stakeholders it is essential that this input may be used in the course of the project.

Non-Disclosure Agreement (NDA)

Before an external stakeholder can participate in project activities disclosing more detailed information about the project and its progress beyond what is publicly available, this stakeholder must sign a Non-Disclosure Agreement (NDA). By signing such an agreement the flow of information, which would normally be project internal, can flow between the project and the external participants, something that is naturally necessary for the external participants to be able to carry out their tasks.

Overview of stakeholder involvement in DRIVER+ main activities

As described above, the amount and types of external stakeholders to be invited to each DRIVER+ activity varies, depending on the nature of the activity and what the project would like to achieve through the external cooperation. The following summarizes the information presented in this section and provides an overview on what types of stakeholders are foreseen to be involved in what DRIVER+ activity.

Communication

The DRIVER+ partner ARTTIC manages the involvement of External Stakeholders in the project, and Michael Löscher on behalf of ARTTIC is the DRIVER+ External Communication Manager (ECM), responsible for the involvement of external stakeholders in the project and a member of the Project Coordination Team (PCT). Michael can be contacted at loescher@arttic.eu, and phone: +49 (0)89 248 83 03-29.Backing Michael up is Anna Ellinge Madar who can be contacted at ellinge@arttic.eu and phone +972 (0)3 373 2008,

The DRIVER+ project will send information out at appropriate intervals in the form of a Newsletter which will give the necessary information for participation in all the DRIVER+ activities. In addition the DRIVER+ Website (www.driver-project.eu) will be used as a conduit of information and registration activities.

To identify potential synergies and foster dialogue, several organisations, initiatives and projects, external to the DRIVER+ consortium and belonging to the wide spectrum of Crisis Management, will be invited to participate in DRIVER+ Workshops on external cooperation to be organised throughout the project as needed. These workshops will be organized when there is an opportunity to do so, e.g. as a session at the I4CMs, at a Third Party event etc. The participants can be individuals, organisations, projects or initiatives relevant to DRIVER+.

Prior to each DRIVER+ Trial a call for application will be published through all project dissemination channels. The call describes the scenario to be used in the relevant Trial and the shortcomings to be addressed, and external solution providers are invited to submit a description of their offered solution(s) to the issues raised. Included in the call guidelines are detailed steps for the application, and submission must carefully follow these steps in order to be eligible.

Coverage of Expenses

The DRIVER+ project has made an allowance to support external participants contributing to the project, and subject to budget limits the DRIVER+ project will reimburse expenses incurred by external participants to project activities, such as travel and accommodation costs. The reimbursements are subject to the conditions set out in the "EXPERT EXPENSES GUIDELINES", which are made available to the external participants prior to their involvement.

Handling of IPR Issues

For External Stakeholders selected to be involved in project activities it may be necessary for Intellectual Property Rights (IPR) information to be shared. In the event that this is required, a separate agreement (Non-Disclosure Agreement) will be signed by the DRIVER+ Project and SMEs.

Data Processing

With online registration to the DRIVER+ Community, the person registering agrees to processing and transferring of his/her personal data. His/her personal data will be treated with absolute confidence, used exclusively for answering his/her requests and not passed to third parties without his/her prior authorisation. Procedures for data processing and privacy protection have been developed in the DRIVER+ WP913 Research Ethics & Societal Impact Assessments, are included in the project Handbook for the partners (see Annex 4). DRIVER+ WP913 is dedicated ensuring that the provision of personal data and its management is in line with the EU General Data Protection Regulation (GDPR) and the recommendations for ethical research