



D953.13 - ENHANCING THE SHARED UNDERSTANDING OF CM – PROGRESS REPORT N°3

SP95 - IMPACT, ENGAGEMENT AND SUSTAINABILITY

JULY 2019 (M63)

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

In order to achieve these objectives, five Subprojects (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 are part of **SP91** as well. **SP92 Test-bed** will deliver a guidance methodology and guidance tool supporting the design, conduct and analysis of Trials and will develop a reference implementation of the Test-bed. It will also create the scenario simulation capability to support execution of the Trials. **SP93 Solutions** will deliver the Portfolio of Solutions which is a database driven web site that documents all the available DRIVER+ solutions, as well as solutions from external organisations. Adapting solutions to fit the needs addressed in Trials will be done in **SP93**. **SP94 Trials** will organize four series of Trials as well as the Final Demo (FD). **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 standardisation.

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. Most important will be to build and structure a dedicated Community of Practice in Crisis Management, thereby connecting and fostering the exchange of 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 a complex 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), Europe is in need of a convergence of resources, but also of solutions 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 today. 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 learned. 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 to cope with today's and tomorrow's threats and crises.

Currently several frameworks, initiatives and visions for Crisis Management exist in Europe, but no overarching strategy has been defined yet at a macro level on how to effectively and efficiently involve the diverse groups of stakeholders. The current and most notable driving forces of this overarching strategical process are (i) the European Union Civil Protection Mechanism (EUCPM) and the envisioned Union Civil Protection Knowledge Network; (ii) the 'Community of Users on Secure, Safe and Resilient Societies' initiative by DG HOME that has made significant progress in facilitating the knowledge exchange in the highly fragmented Crisis Management domain in Europe during the past years, (iii), the Disaster Risk Management Knowledge Centre (DRMKC) providing a networked approach to the science-policy interface in DRM, across the Commission, EU Member States and the DRM community within and beyond the EU, and (iv) the European Forum for Disaster Risk Reduction (EFDRR) which is helping Member States to better align their national policies with the Sendai framework. While these mechanisms aim to define and implement this overarching strategy, a clear need to further develop, support, complement and strengthen the existing frameworks and initiatives has been identified in order to foster innovation and a shared understanding in Crisis Management across Europe.

The ambition of DRIVER+ with regards to an improved stakeholder 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) is established to facilitate this interaction. It aims to become an overarching body connecting Crisis Management stakeholders to exchange best practices, lessons learned and innovative ideas, in order to facilitate the implementation of policies and the uptake of research and innovation by practitioners and policymakers.

Being the third iteration of a series of four reports, the present document specifically focuses on providing the reader with another updated version of the outcomes of activities that took place since August 2018 (M52). The last iteration of this living document (**D953.14**, to be submitted in M70) will provide a final overview of the outcomes of the activities as well as the final version of the strategy and implementation plan for developing the CMINE, and concrete options on how to maintain this Community of Practice (CoP) after the end of the project duration.

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List of Acronyms

Acronym	Definition
API	Application Programming Interface
CM	Crisis Management
CMINE	Crisis Management Innovation Network Europe
CMT	Community Management Tool
CoE	Centre of Expertise
COCP	CMINE Online Community Platform
CoPCM	Community of Practice in Crisis Management
CoU	Community of Users
CSO	Civil Society Organization
D&C	Dissemination and Communication
DG	Directorate General
DPA	Data Protection Authority
DRMKC	Disaster Risk Management Knowledge Centre
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EFDRR	European Forum for Disaster Risk Reduction
EUCPM	European Union Civil Protection Mechanism
F2F	Face-to-face
FC	Final Conference
GDPR	General Data Protection Regulation
KPI	Key Performance Indicators
NGO	Non-Governmental Organization
PCT	Project Coordination Team
PMB	Project Management Board
PO	Project Officer
PoS	Portfolio of Solutions
PRDR	Policy Research Dialogue Roundtable
SP	Subproject
SPCC	Subproject Coordination Committee
URL	Uniform Resource Locator
WP	Work-package

1. Introduction

1.1 Background and objectives for engaging with the Crisis Management Ecosystem

WP953 *Enhancing the shared understanding of CM*, aims at supporting the realisation of the third main objective of the project (i.e. to foster a shared understanding in Crisis Management), and at setting the basis for the creation of a European CM culture necessary to ensure the adoption and uptake of the project's results; and ultimately enhance the European CM capabilities.

Currently several frameworks, initiatives and visions for Crisis Management exist in Europe, but no overarching strategy has been defined yet at a macro level on how to effectively and efficiently involve the diverse groups of stakeholders dealing with the complex field of Crisis Management in Europe. The current and most notable driving forces of this overarching strategical process are (i) the European Union Civil Protection Mechanism (EUCPM) and the envisioned Union Civil Protection Knowledge Network; (ii) the 'Community of Users on Secure, Safe and Resilient Societies' initiative by DG HOME that has made significant progress in facilitating the knowledge exchange in the highly fragmented Crisis Management domain in Europe during the past years, (iii) the Disaster Risk Management Knowledge Centre (DRMKC) providing a networked approach to the science-policy interface in DRM, across the Commission, EU Member States and the DRM community within and beyond the EU, and (iv) the European Forum for Disaster Risk Reduction (EFDRR) which is helping Member States to better align their national policies with the Sendai framework. While these four mechanisms aim to define and implement this overarching strategy, a clear need to further develop, support, complement and strengthen the existing frameworks and initiatives has been identified in order to foster innovation and a shared understanding in Crisis Management across Europe.

The engagement with the CM ecosystem is of utmost importance for DRIVER+ to jointly create acceptance for new solutions and approaches towards the successful introduction of innovation. In particular, the systematic participation of many DRIVER+ stakeholders in various project activities helps the DRIVER+ consortium to align with and to follow-up on relevant policies, challenges, gaps and community needs. The project ambition with regards to stakeholder's 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. Therefore, it is the intention and ambition of DRIVER+ to seek collaboration and provide targeted support to enhance the existing frameworks and initiatives through the following project instruments:

- **Crisis Management Innovation Network Europe (CMINE)** has been established to build a Community of Practice in Crisis Management which is closely aligned with and complementing the Community of Users (CoU) on Secure, Safe and Resilient Societies initiative run by DG HOME. It aims to become an overarching body that connects Crisis Management stakeholders by offering all CM stakeholders a collaborative (online) space in which best practices and innovative solutions for (cross-) national and multi-faceted risk scenarios can be jointly discussed. This will facilitate the implementation of policies and the uptake of research and innovation by practitioners and policy-makers.
- **Policy-Research Dialogue Roundtable (PRDR)** has been developed as workshop-based discussion format that aims to bring together a diverse group of stakeholders to strengthen the knowledge exchange in Crisis Management between policy-makers, the research community and related initiatives.
- **Innovation for Crisis Management (I4CM)** has been successfully established and implemented as an annual conference event which contributes to a shared understanding by enabling exchanges on issues of common interest, best practices and lessons learned in the CM domain as well as by creating synergies between initiatives.

The specific project related objectives that are targeted through these three instruments 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 innovative solutions supporting their operations.
- **Enhance the cooperation framework:** Developing synergies with related initiatives and projects at international and local levels should increase the outreach and intensify the impact of the project, therefore enhancing the transfer of knowledge and research outputs to the practitioner networks.
- **Ensure the relevance of the project activities:** Enabling the participation of external innovative solution providers, concerned practitioners and relevant experts to the DRIVER+ Trials, the Final Demonstration, the PRDR and the I4CM will ensure their high quality, appropriateness and relevance.
- **Get support and attract potential users:** Involving stakeholders properly to assure they can act as advocates of the project, multiplying the outreach and finding appropriate options for securing the sustainability of the project results.

1.2 Scope and structure of the document

While **D953.12 Enhancing the shared understanding of CM – progress report 2** (M52) intended to provide an update of the concept and approach behind the creation of the CMINE since March 2018 (M47), the current document details the concrete implementation of the related tasks since August 2018 (M52). The current document is divided into four core sections:

Section 2 provides the reader with information on the current status of the CMINE development, including information on (1) key activities carried out during the past period and (2) updates of the underlying concepts to ensure applicability and maximize the impact. Finally, (3) it describes the next steps to be taken during the final period of the project.

While the CMINE is composed of offline (e.g. in-person meetings) and online components, the element that is regarded as offering the biggest added value, in particular in support of the CoU framework, is the CMINE Online Community Platform (COCP) which provides an environment where 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 of DRIVER+ and beyond. Moreover, it will be an important tool to ensure the sharing of best practices between a diverse group of stakeholders across Europe. In this regard, **Section 3** provides the rationale for the transition to a new COCP and elaborates upon the conceptualisation as well as the specific features and structure of the updated CMINE online environment.

In addition to the above, two Innovation for Crisis Management (I4CM) events were organised with the aim to contribute to building a shared understanding in CM. **Section 4** reports on the 3rd (September 2018 in Warsaw, Poland) and the 4th (June 2019 in Copenhagen, Denmark) editions of the I4CM.

Finally, complementary to the CMINE in-person meetings, and in order to further strengthen the Policy-Research Dialogue on research and demonstration activities in the field of Disaster Risk Reduction (DRR) and CM, the first of three Policy Research Dialogue Roundtables (PRDR) has been organised on the 28th of February 2019 in Brussels. **Section 4.1** presents an overview of the implementation and key outcomes, and an update on the planned way forward.

This deliverable is the third of a series of four progress reports which intends to inform on the related activities and results, taking into account continuous feedback and developments within the project as well as those outside of DRIVER+. Therefore, this 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. This will align future actions with the dynamics of the actual project workflow and ensure that the right measures are taken at the right time to maximise the project's impact and to ensure the sustainability of the results, which will be concluded upon in **D953.14 *Enhancing the shared understanding of CM – Final report and way forward*** (M70).

2. Development of the Crisis Management Innovation Network Europe

2.1 Current status

Since the previous Progress Report (**D953.12**), the Crisis Management Innovation Network Europe (CMINE) has progressed significantly. At the time of writing the previous Progress Report, the Call for Experts had just been closed and the CMINE team was assessing the quality of the received applications and setting up the Task Groups in close coordination with the Task Group Chairs. At the same time, the Theme Chairs were developing the Task Group Roadmaps in which they outlined the objectives, goals and work processes of their respective Task Group. Furthermore, on the management side of the CMINE, the Steering Committee was about to be set up and convened in person only shortly after the submission of **D953.12**.

Looking at where the CMINE stands now, one can safely say that the CMINE has progressed considerably in the past six months. The main achievements are the successful development of the three Task Groups which are now up and running and are virtually fully self-sustainable. Each Task Group has submitted a Task Group Roadmap which has been approved by the Steering Committee, the Task Group Chairs have met in-person twice and all groups are on track in achieving their objectives. Although each Task Group applies a different management structure (further detailed below), each group is progressing well and is effectively working towards their set objective(s). Moreover, the in-person discussions of the Chairs have helped the CMINE team to identify the challenges that the Theme Chairs face and allowed the Steering Committee to undertake action accordingly (see **D951.12** (1) and **D951.13** (2) for an overview of meetings held).

Apart from the work by the Theme Chairs, the Steering Committee has been developing the Strategy and Workplan Document (see Annex 7) which outlines the timeline and goals of the CMINE until the end of the DRIVER+ project (and beyond). The Steering Committee interacts on a regular basis and an in-person meeting is scheduled for September 2019 back-to-back with the 14th Community of Users event.

Through the transition to a new CMINE Online Community Platform (COCP), the user interface and user experience have been enhanced substantially. More information on the setup and functionalities of the new platform is provided in section 3.

Looking forward, the CMINE aims to focus its attention in the upcoming months towards the proactive community building process, the deliverables to be produced by the Task Groups, the establishment of two new groups and its sustainability; each of which will be discussed in more detail below.

2.2 Governance structure of the CMINE

The following section describes the governance structure of the CMINE and explains how the various roles and responsibilities in the CMINE relate to each other.

The Head Chair serves as the main driver of the CMINE and is responsible for the overall coordination and direction of the initiative. The Head Chair oversees the developments within the various Task Groups and should foster synergies and encourage collaboration across themes. The themes are managed by the Theme Chairs. They are the thought leaders of a dedicated theme and, simultaneously, function as the head of the Task Group developed within the respective theme. The exchanges between the Chairs and the Task Group members take place both in-person and virtual. The CMINE Online Platform, is managed and supported by the CMINE Helpdesk and the newly established CMINE Community Managers (section 2.4.1). The logistical arrangements related to the in-person meetings will be taken care of by the CMINE Helpdesk as well. The general management of the project is led by the Head Chair who receives support from the CMINE Support Office. The Support Office is a dedicated support team that will assist the Chairs with the day-to-day management of the CMINE. The Support Office is responsible for the coordination of the efforts of the various chairs and will provide content support whereas the chairs remain the leads in the reports to be submitted for each theme (Task Group).

The governance of the CMINE lies with the Steering Committee, a group which was established early 2019. The CMINE Steering Committee consists of the CMINE Head Chair, a group of DRIVER+ consortium members as well as one external partner (Risk Society) with specific subject expertise relevant to support the strategic development of the sustainability of CMINE. The role of the Steering Committee is to monitor and evaluate the progress of the CMINE and to provide strategic advice. The Steering Committee is also developing two additional Task Groups – albeit in a lighter form than those that already exist (in line with the KPIs as presented above). These groups will focus on a) standardisation and b) innovative solution competition. Given the limited timeframe, neither of these new Task Groups will become ‘full-fledged’ Groups with a Chair and a call for experts to yield interested experts. Rather, the groups will serve as support to the existing group. The concept of these new Task Groups (and their name) are currently being discussed by the Steering Committee.

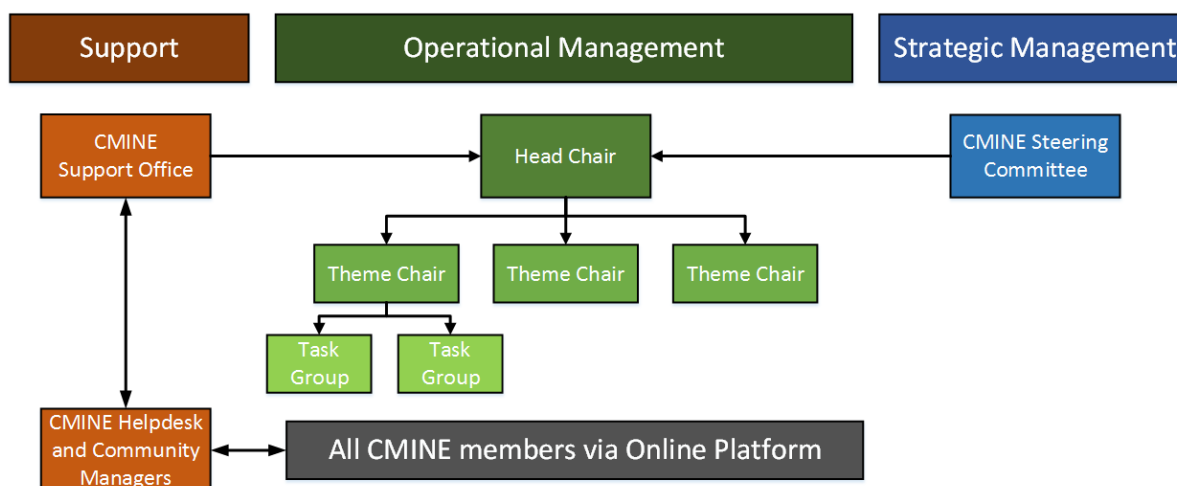


Figure 2.1 : Governance structure of the CMINE

While the CMINE Support Office’s work is essential to activate and support the CMINE community, the overall objective of the Steering Committee is to provide guidance on issues which have a fundamental impact on the development and sustainability of CMINE. To this end, the Steering Committee will focus on the following issue areas:

Table 2.1: Issue areas for CMINE Steering Committee

Issue area 1 - Community development	Responsible partner
Community management	ARTTIC
Dissemination and external engagement	PSCE
Issue area 2 - Validation and quality control	
Validation and Quality Control	CSDM
Issue area 3 - Sustainability	
Sustainability	Risk Society
Long-term governance	Ecorys
CMINE funding models	Ecorys
Issue area 4 – CMINE internal support activities	
CMINE Task Group Coordination/Support Office	Ecorys
CMINE Steering Committee Coordination	Ecorys

The Steering Committee is a consensus driven decision-making body: if consensus driven decisions are not possible, a simple majority voting can be used. The concrete KPIs which have been identified to monitor the CMINE progress are described in **D951.19**. Each Steering Committee member is responsible for his/her respective KPIs and has developed a strategy and concrete work plan on how to achieve the KPIs and objectives. The draft of the strategy for each issue area has been presented during the first physical Steering Committee Meeting on 27 March 2019 and was reviewed in the course of June 2019. The final strategy and work plans will be integrated into the CMINE Strategy Document describing the work of the Steering Committee throughout the year (see Annex 7).

2.3 Themes and chairs

At the official launch of the CMINE, three themes have been presented: wildfires, volunteer management and floods. The themes form the overall framework of the CMINE and allow CMINE users to have targeted discussions on a certain topic within the crisis management domain. A CMINE member is able to engage in or start discussions related to a specific theme on the theme level without having to become a member of a Task Group. From the discussions held at the theme-level, one or several Task Groups can evolve which are working on a specific topic within a theme for a certain amount of time. A Call for Experts for the Task Groups was launched in January 2019 and yielded 47 responses in total (see Annex 8, 9 and 10 for the disseminated Calls for Experts). The Task Group Floods received 17 applicants, the Wildfires Task Group received 18 and the Volunteer Management Task Group received 12 (one of which was a DRIVER+ partner). Below, the composition of each of the Task Groups is outlined also dedicating attention to the objective of each of the Task Groups. More information about the rationale behind the goals of the Task Groups can be found in Annex 4, 5 and 6.

The identification of Themes and Theme Chairs who are also leading the Task Groups happened in the first months of 2019 and was reported upon in **D953.12**, also presenting the rationale for the selection of the three Themes. Since the submission of this deliverable, no additional Themes or Chairs have been added to the CMINE, hence the structure of the network and the division of work remained the same:

- Theme Floods: Hanneke Vreugdenhil and Bas Kolen (HKV)
- Theme Wildfires: Nina Dobrinkova (Bulgarian Institute of Technology)
- Theme Volunteer Management: Martha Bird and Louise Juul Hansen (Danish Red Cross)

A new Theme on Standardisation is currently being developed by the Steering Committee.

The Theme Chairs are supported and coordinated by a Head Chair (Todor Tagarev, CSDM). Task descriptions of the different roles in the CMINE can be found in **D953.12**.

The CMINE Online Community Platform does show a number of other groups, however, these refer to discussion groups and are not actual Task Groups. Deliverable **D953.12** and **D953.11** explain in more detail the difference between a discussion group and a Task Group.

A concise summary of the activities of each of the Task Groups is presented on the CMINE¹ and in sections 2.3.1, 2.3.2 and 2.3.3 below. The Roadmap documents can be found in Annex 4, 5 and 6.

¹ cmine.eu

2.3.1 Task Group Floods

The Task Group is chaired by Hanneke Vreugdenhil and Bas Kolen (HKV Consultants, The Netherlands) and consists of 15 members from Bulgaria, Denmark, France, Germany, Hungary, the Netherlands and Spain. The goal of the Task Group is to visualize and improve the effectiveness of emergency measures related to flood risk management (risk = probability x consequence). Flood management exercises are often focused on flood probabilities, flood preventative measures (to reduce probability) and flood risk (limited awareness).

With the CMINE task group, the aim is to add emergency measures (evacuation etc.) and show effectiveness on a flood risk map. This map should be available for decision makers and their consultants. There is a need to explain and visualize (calculated) flood risk to determine the effectiveness, advantages and accountability of centralized or regional investment on flood risk management measures. The challenge will be to develop an international worldwide approach to measure the effectiveness of flood measures and an effective critical moment, possible risk reduction measures per zone or area).

The challenge of the task group has already been mentioned as one of the DRIVER+ gaps (see **D922.11** (3) **p.36**). This gap is related to the challenge to reduce the risk by assessing the effects of measures: “To enhance response operations [...], there is a need for fast and accurate assessment of the concerned territory at the pre-event and response phase (for the incident-specific attributes that cannot be anticipated at the planning phase). Detailed forecasts and models (predictive modelling capabilities) need to be produced in real time with incident-specific variables. The incident commander needs to understand both the current situation, and how it will evolve (crisis dynamic). Time is a critical factor.”

What will be produced as a result/product of the Task Group Floods is the following:

- An interactive map in which the conditional flood risk is demonstrated. Measures can be selected and immediately the effect/impact on the flood risk is shown. This map can be used in operations and/or as a decision support information system. In case no water level measurements are available a demo will be developed, to demonstrate the possible use of the tool.
- A description of the stepwise elaboration of the assessment of effectiveness of measures to the flood risk, with the help of expert judgment sessions, inspired by a Delphi approach.²
- A list of recommendations for further developments and issues to be elaborated.

2.3.2 Task Group Wildfires

The group is chaired by Nina Dobrinkova (Bulgarian Institute of Technology) and consists of 14 members from Cyprus, Germany, Greece, Ireland, the Netherlands, Spain, Portugal, United Kingdom and the United States. In addition, some members coming from Serbia, Belgium, Italy and France are not present in the core group but are actively involved in all correspondence emails and WhatsApp group discussions. Worldwide, the number of wildfires as well as the total amount of burnt area is increasing every year. This results in losses of human lives, property and hectares of burned forests. In 2018, forest fires occurred in countries like Sweden, Germany and Poland, which is not a common natural hazard on their territories. Fire is frequently a part of a natural cycle within the forests, but the fires that have occurred in recent years are no longer natural as they are influenced by human activities. Additionally, restoration of productive, bio-diverse and resilient forests is becoming more and more difficult.

² See <https://www.rand.org/topics/delphi-method.html>

The main goal of the CMINE Wildfire Task Group will be the creation of common expert view of what can be done with sets and directions towards “guidelines” for policy, science and practice, based on expert opinions. The recommendations of the Task Group will, nevertheless, be rather generic and not elaborated in detail due to limited time and funding. However, they serve as a solid starting point for further future activities. Thus, the Task Group will try to organize all expert knowledge in a way that addresses all observed shortcomings in practice in summarized manner.

Further, this Task Group aims at changing the fire management paradigm, shifting the focus more on prevention than on mitigation of the unwanted effects of fires. This group is promoting the Sendai framework recommendations as well as the recommendations of the EU Commission report called “Forest Fires, Sparking firesmart policies in EU”.³

2.3.3 Task Group Volunteer Management

The Task Group is chaired by Martha Bird and Louise Hansen (Danish Red Cross) and consists of 12 members from Estonia, Denmark, Germany, Italy, Israel, Portugal and Switzerland. The Task Group is focussing on the provision of support and care for spontaneous volunteers. Questions about how to provide support and care to spontaneous volunteers include:

- What are specific needs, concerns and stressors of new types of volunteers?
- How are spontaneous volunteers included in existing support structures in the organization?
- How can volunteers operating in ad hoc groupings access support and care?
- How can established organizations work with ad hoc groupings to ensure high quality work and care for volunteers?
- How can volunteer managers support volunteers who are not already part of a set structure?
- Are crisis management organizations capable of ensuring that spontaneous volunteers work in physically and emotionally safe ways?

The Task Group consisting of representatives of European and International organizations working with and through volunteers in crisis management has three objectives. First, to narrow in on a specific challenge pertaining to caring and supporting spontaneous volunteers. Second to define gaps and challenges as well as lessons learned on support to new types of volunteers. Third, to develop an anthology tool book for representatives of professional organizations which are already or potentially engaging with spontaneous volunteers containing of advice/recommendations, checklists, action sheets, a taxonomy, cases studies/good practices, references to learning material.

2.4 Challenges

During their regular meetings, the Steering Committee members and the Theme Chairs identified several challenges related to the community development process of the CMINE. The following section elaborates on each challenge and presents mitigation strategies.

Engagement of Task Group Members

A challenge is to ensure the regular virtual and in-person interaction between the different members of the Task Group due to limited available time, different agendas and work schedules which at times results in limited meeting participation.

³ https://ec.europa.eu/info/publications/forest-fires-sparking-firesmart-policies-eu_en

The voluntary basis of their involvement and the large size of the Task Group requires creativity and persistence from the Theme Chairs. To overcome this challenge one Theme Chair has mainly been working bilaterally with various Task Group members. Other Task Group members are aware of these bilateral conversations and are involved in regular group-wide updates where the group recollects and coordinates activities.

Lack of a functioning community platform

The CMT (the former platform) was deemed not to be user friendly by the Theme Chairs. Instead one of the Task Groups decided to engage in bilateral coordination via email. The Task Group Wildfires has overcome the challenge posed by the CMT by using WhatsApp as its main communication tool; this app allows for quick messaging and, thereby, ensures dynamic and rapid exchanges. The CMT is now replaced with a state-of-the-art platform with a dedicated workspace for each Task Group (see section 3). Through this the coordination and communication within the Task Groups will be enhanced significantly.

The future growth and the sustainability of the CMINE

Both the Task Groups and the Steering Committee identified the need to promote the network more actively which was voiced repeatedly during the various meetings. To support the awareness of the CMINE various communication materials like a CMINE leaflet and a tailored CMINE invitation were drafted and will be disseminated to potential CMINE members.

The key challenge and focal area of the CMINE Steering Committee is the sustainability and future evolution of the CMINE. With the DRIVER+ project coming to an end in April 2020, the project has now entered a crucial phase in which sustainability models need to be developed and tested. However, as the uptake and usage of the CMINE is to a certain extent dependent on external factors (e.g. the willingness of the EC-funded practitioner network projects using CMINE, potential usage of CMINE within DG HOME's CoU), the implementation of a sustainability strategy is a delicate process. Currently the various Task Group members work pro-bono, and this seems a format that can work after the project duration as well. However, this does require active involvement and engagement of the Chairs. Some form of external funding will likely be needed for their activities, travelling to and hosting meetings, as well as for hosting the platform and the technical help desk.

DRIVER+ management is currently discussing with DG HOME if and how CMINE can best support the CoU in line with the formalization of the CoU governance structure. However, the end of the DRIVER+ project will, most likely, not coincide with the formal establishment of the CoU governance structure. Nevertheless, the uptake of the organisational structure (and online platform) of the CMINE is still under consideration by both parties.

In addition, the project team is further elaborating the concept of Centre of Expertise (CoE) as a potential avenue to sustain the CMINE. A CoE is an organisation operating in the domain of CM and DRR that acts as the primary contact point for practitioner organisations at the national or regional level, supporting their capability development and innovation management. A CoE may choose to adopt either the whole suite of DRIVER+ outputs or only some of its components, for instance the CMINE. While applying these outputs, organisations are free to tailor and adapt them to local or national needs, circumstances and capacities. A CoE not only uses the DRIVER+ outputs but also supports other organisations in using these. It can also maintain and update DRIVER+ outputs and exchange lessons learned between other Centres of Expertise in the various European Member States. In this way, CoEs become part of a pan-European network. By adopting the CMINE a CoE could position itself in the wider crisis management domain, shed light on its work and thereby increase its exposure. Furthermore, the CMINE Online Platform could function as a coordination platform between various CoEs giving them opportunity to closely interact and exchange knowledge.

To promote the usage of the CMINE (and the other DRIVER+ outcomes) and to interest organisations in potentially hosting the CMINE, a workshop will be organized in October 2019. Furthermore, another option would be to apply for a small European Commission grant to sustain the CMINE after 2020.

The mentioned challenges are to be expected when starting up a new Community. The issues have been shared and discussed with all Chairs and the Steering Committee to ensure a continuous learning process and define the best way of working that will enhance the sustainability of the Themes and the Task Groups.

3. The CMINE Online Community Platform

3.1 Current status

During the past period it became more and more apparent that the originally selected Community Management Tool (CMT) significantly limited the project's abilities to work towards the envisioned Community of Practice in Crisis Management (CoPCM). This was in particular related to the following technical aspects:

- Exchanging information with the Portfolio of Solutions (PoS) is not possible in the short term and extensive technical developments (with additional costs) would be required to put this appropriately into place.
- Performance and ease of use – the current user interface and registration process pose an obstacle to attract people to use the online platform for the intended purposes.
- Using a designated domain (www.cmine.eu) is technically not possible and therefore it is not possible to find CMINE on the web.
- No possibilities exist to connect to external sources (e.g. Preventionweb) to automatically create content via RSS feeds.
- Linking of networks and projects to give them exposure and networking possibilities is very limited.

With the aim to overcome this situation, in particular related to the interfacing with the PoS, a thorough internal technical assessment, requested by the PCT, was carried out by ARTTIC in February 2019 (M58) leading to two potential solutions:

Partial integration with external sources through API leading to:

- Retrieve only the URL, the primary key of the solution and a title.
- A page will be available for group administrators to enter the connection details to the PoS, a search field (full text) and date for filtering and a button to export the data matching the search.
- Knowledges will be created directly (but with little information: title and URL).
- The import will be performed every time you click on the button 'import' (only the new elements will be imported).
- NB: this option would require four months development work.

Full generic solution leading to:

- Choose what specific content will be displayed.
- Allow for automatic updates of the information stored.
- NB: this option would require approximately one year development work.

Given the required time for the necessary developments of the CMT and the related uncertainties in a critical phase for the success of the DRIVER+ project, the PCT/PMB decided to look for alternatives and conducted a desk research on and requested demonstrations of commercially available community platforms, offering a modern, state-of-the-art platform with all required functionalities for a well-functioning, robust and future-proof CMINE. The criteria and requirements for assessing these alternatives were the following:

- Full customization and branding (visual identity).
- API documentation allowing for the integration with external sources such as the PoS.
- Full ownership of data.
- Data storage in the EU, fully GDPR compliant.
- Simple registration and import of profile information (e.g. LinkedIn).
- Expert database.
- Linking and connecting networks and projects (umbrella function) .

- Public and private groups/forums.
- Events registration.
- Document sharing.
- Advanced analytics.
- Intuitive administration of access rights and permissions.
- Social media sharing.
- Gamification.
- Payment schemes (membership fees).
- Instant messaging.
- Mobile ready website.
- Mobile app.

During April 2019 (M60) a desk research about commercially available Software as a Service (SaaS) online community platforms was conducted by consulting two main online portals that allow for the assessment and comparisons of different software services, namely:

- a) <https://www.capterra.com/community-software/>
- b) <https://www.trustradius.com/community-platforms>

Based on the information from these two portals a longlist of 20 potential online community platform solutions was compiled, including an initial assessment based on the reviews and a cross-check on the public websites of the respective solution providers. This resulted in the identification of the following four short-list candidates for which demonstrations were requested:

1. Higherlogic (<https://www.higherlogic.com/home>)
2. Hivebrite (<https://hivebrite.com/>)
3. Vanillaforums (<https://vanillaforums.com/en/software/>)
4. Zapnito (<https://zapnito.com/>)

Based on the analysis of the demonstrations received, the Project Coordination Team (PCT), supported by the Project Management Board (PMB) decided in M62 to substitute the original CoPCM platform CMT (provided by ARTTIC) with the commercial alternative Hivebrite. The main reason for the decision to replace the CMT and outsource the technical development to a commercial Software as a Service (SaaS) provider is due to the fact that the implementation of the required technical functionalities of the CMINE Online Community Platform (COCP), in particular the interfacing with the Portfolio of Solutions, would have taken too long, therefore potentially jeopardizing the achievement of the respective project objective. Given the overall ambition level of the CMINE and the related project objectives, a contract with a duration of three years has been signed with Hivebrite in order to ensure the sustainability of the CMINE and COCP beyond the formal lifetime of the project (till June 2022). The foreseen activities of **T953.3** were cancelled and will be continued within the scope of **T953.1** in order to ensure the achievement of the overall project objective on enhancing the shared understanding in crisis management in Europe.

The implementation of the new CMINE Community Platform began in June 2019 (M62). Full details about the solution and its capabilities, the conceptualization of the CMINE as well as the next steps will be provided in the next sections.

3.2 Conceptualization and setup of the CMINE Online Platform

The main objective of the CMINE is to link and connect stakeholders dealing with Crisis Management allowing them to exchange on challenges at all levels of the crisis management cycle. In order to do so in a structured manner an overall conceptual approach has been defined that directly builds upon the different capabilities of the Hivebrite solution.

The CMINE Online Community Platform (COCP) was set up in a way that allows users to grasp the key sections at a glance and navigate the platform intuitively. The setup, branding and configuration was done

in close collaboration with service provider Hivebrite who hosted on-boarding workshops and gave direct support depending on the needs. The following paragraphs will provide a short and concise overview of the setup and configuration while the detailed information about the platform setup and its functionalities can be found in Annex 7

After having clicked on the link www.cmine.eu users arrive on the public page. This page is the entry point to the Community and will function as a teaser to encourage people to join the community. The page will introduce CMINE presenting its unique value proposition. Moreover, it will display some selected news, a video of the CMINE Head Chair and present the public groups. It is also the entry point for registration.

The registration process is intuitive and straightforward for the users. To avoid any risk of spamming a validation step was integrated. After having requested to join the CMINE, providing his/her full name and email address, the future user receives an invitation from the Community Manager and his/her profile is being created on the platform as soon as he/she accepts this invitation. In addition to standard questions regarding names, country of origin, organisation and position, invited users need to answer some complementary questions on the clusters to which they belong and their fields of interest with the aim to build the expert database with a comprehensive and relevant set of information. They cover:

- Policy maker (e.g. international, national, sub-national entities).
- Practitioner (e.g. Fire and rescue services, police, medical).
- Private Sector (e.g. Industry, SME).
- NGOs and CSOs (e.g. IFRC, network organisations).
- Science and Research.
- Training and Education.
- Media.
- Standardisation.

After registering and log-in to the COCP, on top of the page, a user search function as well as a menu is displayed that facilitates direct access to all sub-sections of the community. The current sub-sections of the CMINE include but are not limited to: News, Forums, Groups, Live-feed, Events, Projects, Media Centre, Directory and Portfolio. In addition, each member has a profile page which contains information on recent activity, skills, fields of expertise and events attended. For a detailed description of these sections and their functionalities please consult Annex 7.

The figures on the next pages depict the conceptualisation that guided the setup and configuration of the COCP. While Figure 3.1 depicts the global conceptual view (structure of the community platform and subsites, inputs and outputs), Figure 3.2 zooms into the current state-of-play of ideas for the central element of the COCP, which are the groups.

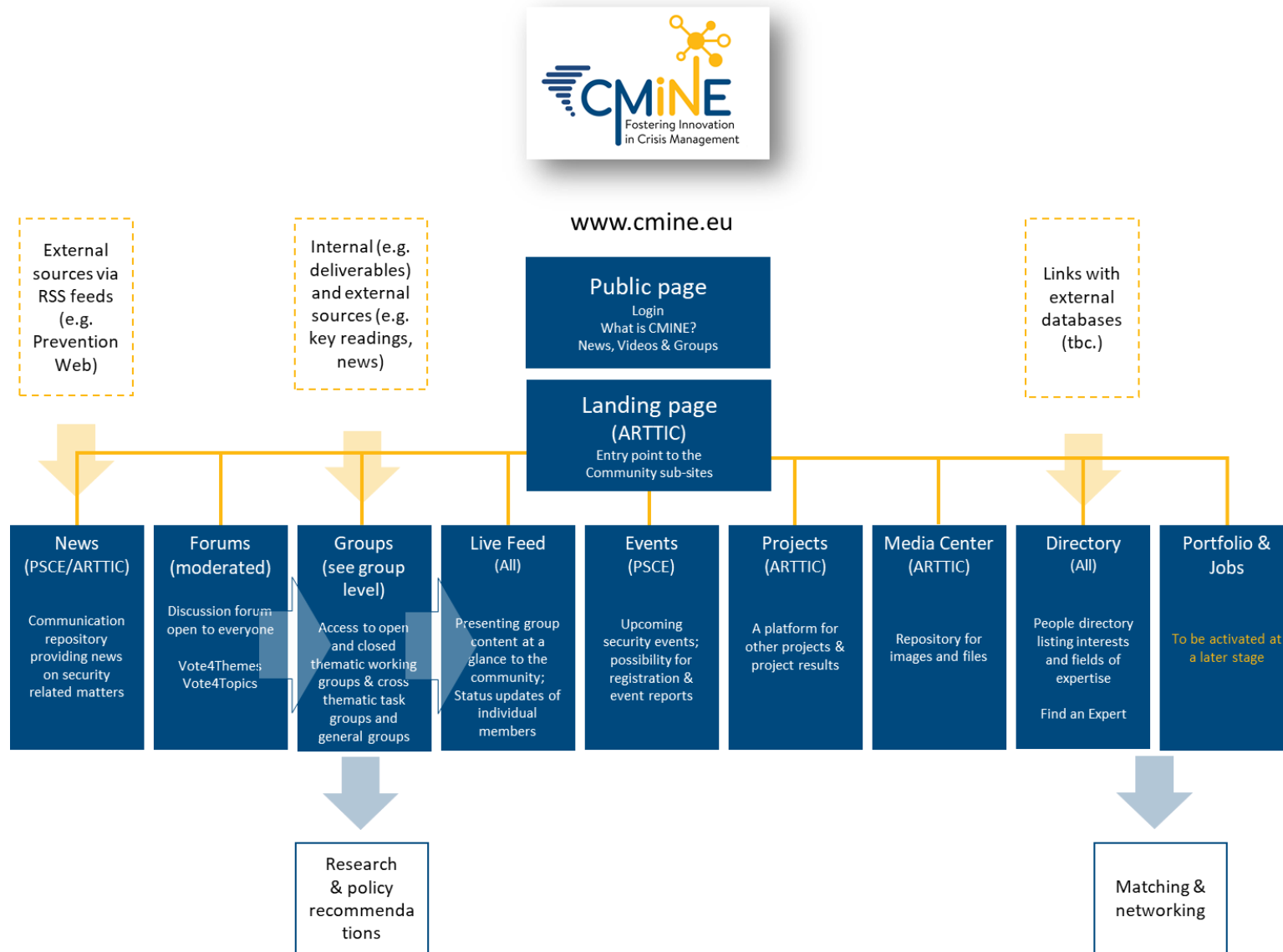


Figure 3.1: Sitemap of the CMINE Online Community Platform with inputs (yellow) and outputs (blue)

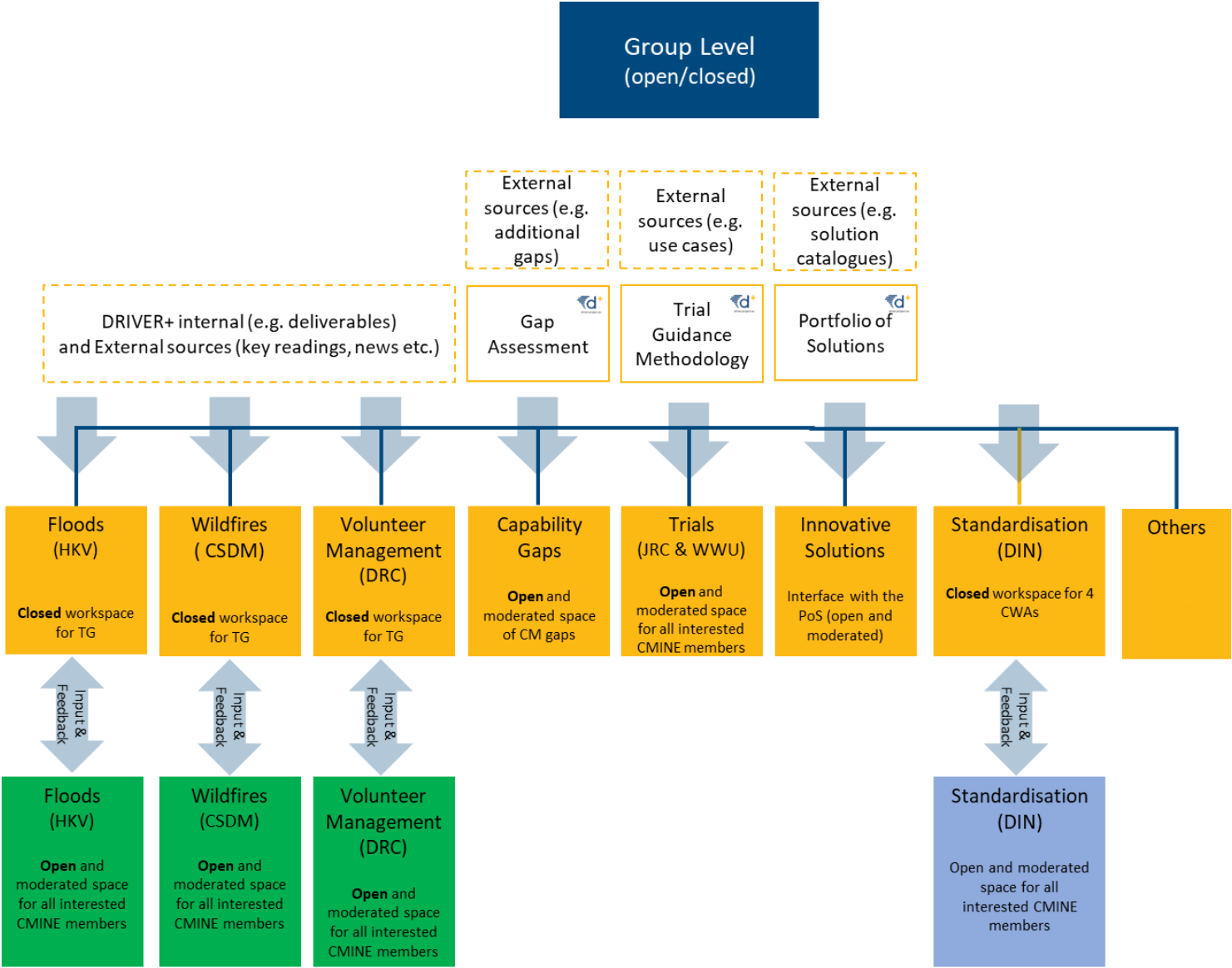


Figure 3.2 : Sitemap of the central element of the CMINE Online Community Platform, the groups

3.3 Security and data protection of the CMINE Online Community Platform

The provider of the COPC platform Hivebrite is KIT UNITED SAS, a French Software as a Service (SaaS) company. In the context of EU Regulation 2016/679 (GDPR), the Data Processing Agreement (DPA) provided by Hivebrite ensures full compliance with the GDPR provisions and aims to determine the rights and obligations of the contractual parties.

In addition have Terms of Use (Annex 13) as well as a Privacy Policy (Annex 14) been defined that every user needs to agree to upon registration of an account.

3.4 Community development

3.4.1 Community Management

In order to facilitate and structure the development of the community, a dedicated community management approach is to be put into place. Community management can be understood as the process of altering an existing community to make a community stronger. This usually means attracting new people to a community, reaching out to new participants, or giving more opportunities for current community participants to engage with one another. The active management of a community leads to a larger and more engaged audience.

While several DRIVER+ partners, in particular the members of the CMINE Steering Committee, play an important role in developing the CoPCM, two dedicated Community Managers (Myriam Ben Ammar and Laure Dodin, ARTTIC) were assigned to structure and guide the process. Their role reflects the inherent logic and workflows that guided the conceptualisation of the CMINE platform. Specifically, they are tasked to:

- Set up and configure the CMINE Online Platform.
- Provide back-office support (e.g. user administration and admission).
- Provide content-oriented support to Theme Chairs and project partners to identify relevant content for the population of the platform.
- Support the outreach to project partners and external stakeholders for the identification and population of the platform with relevant content.
- Facilitation and moderation of community interaction and discussions on the CMINE online platform, in particular beyond the scope of the established Task Groups.

3.4.2 Dissemination and External engagement

Implementing effective actions regarding dissemination and external engagement at an early stage is crucial for the sound and rapid development of CMINE as it will provide the network with the necessary momentum to grow and expand after the closure of DRIVER+. The following concrete actions were initiated towards that objective:

- Mapping and effectively engaging with CM networks, organisations and projects that could feed and/or be positively affected by CMINE.
- Elaborating draft invitation letters adapted to the different target groups (networks/ projects/ individuals) (ready by end of August 2019).
- Development of a CMINE leaflet (ready by end of August 2019).
- Active promotion of the network on Social Media via the CMINE Twitter account and the DRIVER+ Linked-In page.
- Establishing a list of external CM media/publications in order to widen the outreach of CMINE-related communications.

3.4.2.1 Networks

A list containing the most relevant networks, organisations and projects to help CMINE grow its membership as quickly as possible has been elaborated, including general CM networks as well as networks specialised in fields related to the CMINE Task Groups. The document is not definitive and will expand over time in line with the domains covered by new Task Groups. Contact has already been engaged with some of these networks and the list will be continually reviewed and enlarged to ensure the KPIs are met. Each of the entities identified will be engaged and incentivized to join and contribute to CMINE via a message adapted to the target group.

Discussions with the DG HOME Community of Users (CoU) are ongoing and dedicated sessions at future CoU meetings will be planned. These and other international conferences will be used to disseminate CMINE widely and will generate networking opportunities with CM experts, practitioners, policy makers and researchers. Every opportunity possible will be used to promote CMINE and its value to the widest CM community.

Furthermore, the relationship with the Disaster Risk Management Knowledge Centre (DRMKC) and the European Response Coordination Centre (ERCC) will be continued to maximise the awareness and outreach profile of CMINE within these important organisations and their networks.

3.4.2.2 Individuals

The first and most important task is to ensure that all DRIVER+ partners are registered on CMINE. Partners will then be encouraged to invite their colleagues, peers and wider contacts to join. To make this as easy as possible for partners, invitation email templates will be developed by end of August 2019 that can be quickly personalised.

All practitioners, observers and experts that have participated in, or attended, the Trials will be invited to register on CMINE. An email template will be created by end of August 2019 that the Trial Directors can send to all participants.

Everybody that attended the I4CM and PRDR events will also be invited to register, as will the solutions providers. And not just those that participated in the Trials, but also those that responded to the various Calls for Applications. They will also be invited to forward the invitation to like-minded colleagues and peers.

Finally, the CMINE Task Group members will be asked to register and to invite their peers and colleagues in the various thematic domains.

3.4.2.3 Links to other projects

Effectively engaging with other CM projects and initiatives is crucial for building the momentum necessary to CMINE's rapid growth. CMINE will feed on the wealth of knowledge provided by these projects while providing them with a common platform to discuss, share results and discover the latest innovations in CM under specific thematic areas. Engagement with external projects builds upon the External Cooperation work already been carried out within DRIVER+. The preliminary list of identified CM networks, organisations and projects per specific thematic areas is included as Annex 15.

Concrete efforts undertaken to engage with other projects include:

- Listing of relevant projects/initiatives under CMINE thematic areas.
- Developing pathways for partnership with these projects via online (social media, website, newsletters) and offline (participation to projects' workshops and conferences) communication activities.
- Listing of well-established CM conferences in Europe to present CMINE and engage with projects and initiatives in the field.

3.4.2.4 Branding

The CMINE visual identity has already been developed and reinforces the DRIVER+ identity through the use of its common typeface and colourways. It has, however, been designed so that it can sit on its own and exist outside of the project, once this has concluded in April 2020.

The CMINE branding has been used both online and in a selection of printed material. It will be applied across all future communications materials, in all media, in a consistent manner to ensure the integrity of the brand, as it becomes the recognised face of the Crisis Management community, bringing other networks together under one umbrella identity.

3.4.2.5 Online

A dedicated CMINE public website is available, preparing CMINE for its future life after DRIVER+. The site will include information about the network, the benefits of joining, a registration page, news and events, and a blog. Initially the DRIVER+ partners, CMINE chairs and practitioners will be contributing to the content; however, also other practitioner organisations, researchers, projects, policy makers, industry will be invited to submit copy for the discussion fora. This will be achieved through the CMINE Online Community Platform (COCP), as well as via social media.

Options and opportunities of promoting CMINE on the Portfolio of Solutions are being explored, including the possibility of a series of banner ads. This would be an obvious opportunity to ‘speak’ directly to the prospective target audience.

3.4.2.6 Social media

Social media are extensively used to raise awareness about CMINE, make the community grow and share CMINE’s results and achievements. To that end, a dedicated Twitter account has been created. Social media activity surrounding CMINE will be carried out towards a threefold objective:

- Raise awareness about CMINE and incentivize relevant external entities (networks/ projects/ organisations/ experts) in CM to join and contribute to the network.
- Stimulate activity and disseminate preliminary results obtained under each thematic area.
- Communicate about CMINE activities (dedicated workshops/presence at third-party events).

A series of short video interviews with the Head Chair and two of the thematic chairs have been published, explaining the role and structure of CMINE. These can be expanded at future events to cover other topics, as appropriate. CMINE will also be intensively promoted on LinkedIn, via simple posts or the dissemination of articles and white papers. A high degree of activity and engagement with thematic chairs and external stakeholders is expected on a regular basis.

3.4.2.7 Mass media

A list of key specialised and general media has been drafted via desktop research and use of DRIVER+ internal networks to raise awareness and disseminate CMINE’s results. Press releases and articles will be elaborated to communicate about CMINE’s milestones and achievements to the external world. Particular attention will be devoted to ensuring that partners widely disseminate CMINE-related information via their own internal networks and media to maximise outreach and impact.

Current achievements include:

- A dedicated supplement on DRIVER+ and CMINE for the Crisis Response Journal is foreseen for October 2019. The journal reaches 3,000+ policy makers, experts, practitioners, researchers in CM. Similar opportunities with other specialist media publications are being investigated.

- An article about CMINE Wildfire Task Group to be published in the October 2019 issue of Fire Magazine, being one of the leading magazines for all the latest fire news on fire safety and prevention, technology and products, the fire community and events.

Efforts to engage with external media about CMINE will build upon the work already carried out as part of DRIVER+ external media relations. The initial list was expanded with media and publications relevant to the CMINE thematic groups. The preliminary list of identified media/publications relevant to CMINE is included as Annex 16.

3.4.2.8 Conferences

The leading international conferences in the sector will be identified through desk research. Wherever possible speaking slots in plenary sessions, workshops and panel discussions will be secured. It is anticipated that the CMINE Chairs and some Task Group members will take up these speaking opportunities. Some conferences may well also offer stand (booth) space to demonstrate CMINE and offering networking opportunities to disseminate the benefits of CMINE to prospective members.

4. The Innovation for Crisis Management (I4CM) events

4.1 The third edition of the I4CM event, Warsaw, 3rd-4th September 2018

The rationale and objectives as well as the detailed programme of the event can be found in **D953.11 Enhancing the shared understanding of Crisis Management – progress report 1** submitted in M46 and **D953.12 Enhancing the shared understanding of Crisis Management – progress report 2** submitted in M52. Both reports are public and available on the DRIVER+ website.

Overall, the two-day event recorded 172 attendees. The audience consisted of Crisis Management practitioners and experts, policy makers, researchers, solution providers, representatives of standardisation bodies, related projects and specialized media. The detailed [event report](#) to be found on the DRIVER+ website includes detailed statistics on the audience and presents the key outcomes. The results of the evaluation survey can be found in Annex 2.

A total of 108 tweets were posted under the hashtag #I4CM – these do not include tweets from before the event that announced it or promoted it. Of those 108 tweets, 13 were retweets from accounts of related projects and organisations that took part in I4CM and which tagged the DRIVER+ account. According to Twitter Analytics, during the period of 2 to 7 September 2018, tweets by the DRIVER+ account had 21,400 impressions.

The [Press release](#) of the event is available on the DRIVER+ website and one article has been published by the [Crisis Response Journal](#) (p.67-77).

4.2 The fourth edition of the I4CM event, Copenhagen, 12th-13th June 2019

The I4CM4 Programme Committee composed of the task leader (ARTTIC), the event host (DRC), the scientific coordinators (TNO, DLR and WWU) and ECORYS, adopted “Volunteer Management in a Crisis Situation” as a focal theme. Special attention was being paid to issues around organised volunteers and psychosocial support to volunteers.

The fourth I4CM event intended mostly to act as platform for Crisis Management stakeholders, providing an opportunity for them to:

- receive insights and discuss challenges related to Volunteer Management as part of Crisis Management.
- be informed on best practices in Volunteer Management – including spontaneous volunteers - in the field of Crisis Management.
- share experience about Volunteer Management as part of Crisis Management.

Approach-wise, in order to encourage lively interactions between participants, the fourth I4CM encompassed on purpose a limited number of talks but put emphasis on panel discussions and participation to workshops. Inspirational talks and some practical exercises, including gamification, prompted participants into reflecting on best ways to manage, care for, and provide psychological and technical support to volunteers. The facilitation role played by a journalist and communication consultant as well as the hiring of a “visual note taker” during the two day of the event further helped to make I4CM4 livelier and engaging.

In total 127 attendees participated at the event. The detailed event report includes more details on the agenda, the audience and the key outcomes. It is available on the [DRIVER+ website](#). The results of the evaluation survey can be found in Annex 2.

A total of 91 tweets were issued using the #I4CM hashtag in the period surrounding the event. 22 tweets were produced from the @DRIVER_PROJECT Twitter account. These were supported by high quality pictures and earned more than 8,000 impressions and a considerable engagement rate of 45 retweets and 172 likes during the two conference days. The Press release of the event is available on the [DRIVER+ website](#). The impact of the Dissemination and Communication strategy for the event will be available in D952.13 Dissemination and Communication activities progress report 2.

5. The Policy-Research Dialogue Roundtables

5.1 Background

In the past years EU research and innovation projects delivered extensive results. But currently no possibilities exist to thoroughly assess and compare if the outcomes actually provide valid contributions for the capability development of practitioner organizations that they target. Furthermore, a thorough understanding is lacking to what extent the outcomes actually address the defined policy demands. The Policy-Research Dialogue Roundtable (PRDR) have been developed as workshop-based discussion format with the aim to bring together a diverse group of stakeholders to strengthen the knowledge exchange in Crisis Management around these subjects between policy-makers, the research community and related initiatives.

The three planned PRDRs aim to bring together EC DGs (in particular DG HOME, DG ECHO/ERCC, DG RTD and DG CLIMA) as well as the DRMKC, international organisations (IFAFRI, UNISDR), national civil protection authorities from the Member States and selected Research & Innovation projects to allow discussions related to EU policy implications of the topics to be discussed. The three PRDRs will be planned in close alignment with pre-planned policy meetings within the CoU framework in order to ensure the participation of relevant experts and representatives and to be most resource-efficient. Each PRDR will have a distinct focus, and the final decision on the scope and objective will be taken in close alignment with DG HOME / DG ECHO / REA in order to take into account recent developments appropriately.

Independent of the scope of the PRDRs briefing material will be prepared and sent to the invited participants upfront of the Roundtables. The PRDRs will be conducted with a mixture of key-note speeches and interactive sessions (e.g. applying design-methods for brainstorming) in order to obtain key results and ideas from the participants. The event report/position paper that will be produced as output of the first and second PRDR will be used to inform and engage relevant stakeholders (participants and the broader CM community) in further discussions as well as to define the scope and objectives of the second and third PRDR.

5.2 PRDR 1 – Scope and key results

The first Policy-Research Dialogue Roundtable was organized back to back with the CoU Governance meeting held in 28th February 2019 in Brussels. It aimed at (i) understanding how to best facilitate an innovation eco-system in the DRR and CM area, in the context of emerging networks of crisis management practitioners and innovation clusters and relevant knowledge networks, (ii) fostering a dialogue on how a pan-European approach to capability development and innovation management in the field of DRR and CM can be supported through a common trial and validation framework and (iii) defining the needs and requirements for a better exchange of information and results from research projects dealing with solution development, trialling and validation.

Together with an expert audience involving several EC DGs, international organisations, national civil protection authorities and representatives from selected Research & Innovation projects, the discussions led to several key outcomes and recommendations (see Annex 11) based upon which a DRIVER+ position paper was elaborated and shared with the registered participants of the PRDR-1 (see Annex 12) and published on the DRIVER+ public website.

5.3 PRDR 2 & 3 - planning the way ahead

Until the end of the DRIVER+ project two more PRDRs will be organized in Brussels each with a distinct focus.

The scope and objectives for PRDR-2 have been discussed and drafted in close alignment with DG HOME taking into account current ideas and requirements from within the CoU framework. It has been agreed with DG HOME and REA that PRDR-2 should take place in December 2019 as a direct follow-up of the SRE2019 and the DRIVER+ Final Demo. The focus of PRDR-2 will be on research trends and gaps, the strength of networks, involving practitioners in research, and what this may imply for the future programming of DRR research within Horizon Europe. DRIVER+ will be the co-organizer of the event and will directly support DG HOME through this event in providing inputs to the ongoing research programming for Horizon Europe. DRIVER+ will be the lead contributor towards defining and providing inputs for the requirements of an underlying infrastructure for DRR in Horizon Europe. This could cover the following elements:

- Results and policy recommendations following the Trials.
- Value and implications of having the DRIVER+ Test-bed (both Trial Guidance Methodology and technical infrastructure) as a common research infrastructure.
- Value and implications of having CMINE supporting both the CoU and research projects (incl. the EC-funded Networks of Practitioners).
- Value and implications of having the PoS, especially when connected to the EC's Projects Explorer, Gaps Explorer and CMINE.

Further details on the setup of the programme, the foreseen contributors and invitees as well as the division of roles and responsibilities between DG HOME and DRIVER+ will be jointly defined end of August 2019. DG HOME aims to invite as many as possible relevant DG and MS representatives, other projects and UN representatives. PRDR-2 will provide a unique opportunity for DRIVER+ to raise further awareness about the project, work towards the sustainability of its key results, and collect relevant inputs for the final phase of its lifecycle.

The PRDR-3 will be held in conjunction with the Final Conference from 18-20 February 2020 in Brussels. The focus will be on standardisation, in particular on presenting and discussing the results of the four CEN Workshop Agreements (CWAs). While the detailed planning of the PRDR-3 has not yet started it has been proposed by DIN to invite two research projects in addition to the members of the CWAs, namely:

- a) [STAIR4SECURITY](#): The main objective of STAIR4SECURITY is to create a collaborative platform as single-entry point of information on the security sector coming mostly from research activities allowing a better governance of standardisation needs in the Disaster Resilience and the CBRN-E (Chemical, Biological, Radiological, Nuclear, and Explosives) sectors. Within this project DIN will work on an update of the CWA to simplify the process for research projects.
- b) [BRIDGIT2](#): aims to overcome the barriers between the standardization world on the one hand and on the other the European research and innovation community. Standardization should become an integral part in the research and innovation lifecycle and will thereby foster the integration of the research and innovation community into standardization.

Further details about the scope and objectives of PRDR-3 will be elaborated together with DIN and the Final Conference Committee.

6. Conclusion and way forward

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. The success of this project will greatly depend on an adequate, proactive and fruitful engagement approach with a diverse group of stakeholders. This will increase the project impact and relevance, facilitate the sustainability and/or exploitation of the outcomes by the stakeholders and help fostering a growing and active CM/DRR community.

The engagement of policy makers, researchers, practitioners, industry representatives, and citizens in crisis management innovation is key to reducing fragmentation, creating a shared understanding, and finding better solutions smarter and faster. Therefore, the CMINE will constitute a crucial element of the DRIVER+ project by acting as an overarching body that will link and connect stakeholders dealing with CM 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.

During the previous reporting period stakeholder engagement has been one of the central elements and continues to be a critical success factor for DRIVER+ to make its outcomes as useful and fit-for-purpose as possible, hence, contributing to their sustainability. Given the fact that the project's ambition with regards to stakeholder engagement is a long-term one, namely the building of an active Community of Practice in the field of CM that will be sustainable after the end of the project, in the final phase of the project even more efforts will be dedicated to expanding, consolidating and managing the CoPCM. The DRIVER+ project has already made significant steps into this direction and while key issues of the past periods have been successfully resolved recently, the project is now in an excellent position to leverage and strategically exploit its results and extensive networks.

The additional emphasize that has been and will be put on this key objective of the project can be clearly noted from the proposed changes and additions related to CMINE that were made for the 5th amendment to the DOW. Most notably this includes the transition to a state-of-the-art online community platform for CMINE and the establishment of a dedicated community management team. Through the combination of these two elements this projective objective has come closer within reach and will be worked towards to the maximum of the partners abilities. Nevertheless, due to several dynamic political processes which are beyond the control of the project, the future of the CoPCM will (and should) not only be decided upon by project alone.

The continuous engagement with the CoU initiative of DG HOME will be deepened and expanded in the final period with the aim to jointly working towards finding and establishing arrangements that are of mutual benefit of both sides while avoiding duplications. In the light of the project's sustainability ambitions this engagement, and the prospective integration of CMINE into the CoU framework, will continue to be the main path to be intensively followed while also other options will be explored.

In addition to the two PRDRs, which will be jointly organized with DG HOME, will enable the project to further strengthen its position and recognition on DG level as a key stakeholder in CM within Europe, therefore potentially contributing further towards the sustainability of all project results.

With the overall roadmap of WP953 until the end of the project being mostly defined, it's time to look ahead towards the scope of the final version of this series of progress reports. While the first three iterations of the progress reports have been very much focussed on establishing the framework and answering the "HOW" (tools/mechanism the project applies to contribute to the development of a shared understanding), will the final version of this deliverable also aim to reflect on the "WHAT", in particular the question:

What kind of shared understanding has been enhanced by DRIVER+ through the establishment of the CoPCM?

In order to be able to answer this question it is the intention to develop a framework that helps to not only determine and, if possible, also measure such a shared understanding and its enhancement. The detailed planning on how to best obtain such information will be executed in close collaboration with WP952, in particular in preparing for the Final Conference, with WP912 as well as with all SPs. Particular focussing will also be put on how the knowledge which is generated through the DRIVER+ Trials contributed to the enhancement of the shared understanding within the CoPCM in Europe and how this momentum can be maintained.

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Annexes

Annex 1 – DRIVER+ Terminology

In order to have a common understanding within the DRIVER+ project and beyond and to ensure the use of a common language in all project deliverables and communications, a terminology is developed by making reference to main sources, such as ISO standards and UNISDR. This terminology is presented online as part of the Portfolio of Solutions and it will be continuously reviewed and updated⁴. The terminology is applied throughout the documents produced by DRIVER+. Each deliverable includes an annex as provided hereunder, which holds an extract from the comprehensive terminology containing the relevant DRIVER+ terms for this respective document.

Table 1: DRIVER+ Terminology

Terminology	Definition	Source
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.	Initial DRIVER+ definition.
Community of Practice	<p>A platform that facilitates and fosters cooperation and synergies among Crisis Management professionals. A broad variety of stakeholders including practitioners, researchers, industry representatives and/or policy makers can exchange knowledge and best practices and initiate cooperation on Crisis Management topics.</p> <p>DRIVER+ note 1: Within DRIVER+ it is implemented as the CMINE consisting of an online platform and face to face meetings.</p>	Initial DRIVER+ definition.

⁴ The Portfolio of Solutions and the terminology of the DRIVER+ project are accessible on the DRIVER+ public website (<https://www.driver-project.eu/>). Further information can be received by contacting coordination@projectdriver.eu.

Terminology	Definition	Source
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 training, rehearsals and reviews to ensure the preparedness, response and continuity plans stay current and up-to-date.	ISO 22300:2018(en) Security and resilience — Vocabulary.
Disaster risk reduction	Disaster risk reduction is the policy objective aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contributes to strengthening resilience.	UNISDR: Terminology on Disaster Risk Reduction: A Technical Review. August 2015 p14.
End-users	Individual person who ultimately benefits from the outcomes of the system. Note 1 to entry: The End-user can be a regular operator of the software product or a casual user such as a member of the public. DRIVER+ Note 1: In the context of DRIVER+ End-user encompasses practitioners, solution providers and other stakeholders.	ISO/IEC 25010:2011(en) Systems and software engineering — Systems and software Quality Requirements and Evaluation (SQuaRE) — System and software quality models
Gap	Difference between the existing capabilities of responders and what was actually needed for effective and timely response.	Adapted from Project Responder 5, Homeland Security, Science and Technology, August 2017.
Innovation	Implementation of a new or significantly improved product (good or service), or process, new marketing method, or new organizational method in business practices, workplace organization or external relations. ISO 37500:2014(en) Guidance on outsourcing, section 3.6: new or changed object (3.6.1) realizing or redistributing value.	ISO 9000:2015(en) Quality management systems — Fundamentals and vocabulary, 3.6.15.
Interoperability	The ability of diverse systems and organisations to work together, i.e. to interoperate.	ISO 22397:2014(en) Societal security — Guidelines for establishing partnering arrangements.

Terminology	Definition	Source
Lessons learned	Result of the lessons learning process.	Initial DRIVER+ definition.

The latest terminology can be found [here](#).

Annex 2 – Evaluation of the third Innovation for Crisis Management (I4CM) event in Warsaw (Poland), September 3-4, 2018

Results of the evaluation survey

Based on the evaluation summary the event was regarded as overall highly satisfactory results while recommendations on how to further improve the event format were received from the participants.

Number of responses of participants in total: 20 responses. It is lower than expected in the KPIs and an improvement is needed for the next I4CM.

Q1 How would you rate the overall logistics and the support from the organisation team for the event(s) you have attended?

- Excellent: 20%
- Very good: 70%
- Good: 5%
- Fair: 5%
- TOTAL: 100%

Comments

- It was fine
- Nice location. Good catering
- Good facility. Effective admin
- Well organized, helpful, very interesting discussions
- Overview of the program should have been more visible on the second day
- Good venue, well organised, no major flaws

Q2 The event met my expectations

- Strongly agree: 30%
- Agree: 55%
- Neither agree nor disagree: 10%
- Strongly disagree: 5%
- TOTAL: 100%

Comments

- Maybe include a networking event
- The discussions were too general. I was expecting more specific and practical information
- Mix panels and other kind of sessions. Too much sitting at the auditorium during the first day
- We cannot really comment now, as overall, we need to familiarize ourselves with DRIVER+ "procedures", actors, ways to collaborate, etc, but it was most interesting to exchange information and views with other exhibitors and DRIVER+ organizers

Q3 The length & format of this event was appropriate

- Strongly agree: 10%
- Agree: 75%
- Neither agree nor disagree: 15%
- TOTAL: 100%

Comments

- I only attended the second day. It was hard to make 2 full days available

- The first day was too long taken into consideration the early bird travel start for me and others. The second day ended too late in the day for me to get back home in the same evening.
- As solution provider/exhibitor, it was a bit frustrating to have 1 day demonstration really only, perhaps it would have been easier to have visitors come by the booths if the venue had been at the same level as the conferences
- There was a lot packed in on the first day. I thought more time may have been given to the panels and Q&A
- Unfortunate to start on a Monday.

Q4 All points from the Agenda were covered

- Strongly agree: 25%
- Agree: 65%
- Neither agree nor disagree: 10%
- TOTAL: 100%

Comments

- All sessions went ahead
- We did not have expectations as to the Agenda, however it was quite interesting to witness accounts/return-on-experience from other solution providers, through it seemed a bit difficult to attend to conferences/presentations at the same time, so perhaps decorrelate clearly the times of exhibition and events?

Q5 Enough time for discussion and queries was provided

- Strongly agree: 15%
- Agree: 45%
- Neither agree nor disagree: 15%
- Disagree: 25%
- TOTAL: 100%

Comments

- A number of presentations were too long, which limited discussion time
- I would like to have a networking event with so many people from different countries/organisations there
- Would have been great to have more time for Learnings from Trial 1.
- Although we would have loved more queries;-)
- I think more time would have been helpful for Q&A
- My answer regards to practitioner's workshop (second day, boring hours). Too much time was devoted for initial presentations and too less for presentation of networks of practitioners and real discussion
- More networking/ mingling would be good.
- However too much talks/panels during the first day and not much interaction

Q6 What were the strengths of the event? What did you find most useful?

Comments

- Meeting other parties involved and related projects. Hearing about the experiences from Trial 1
- network DRIVER+ and others
- Workshops
- Meeting other people
- To meet other Crisis Management Networks, listen to their presentations and to hear the goals and objectives for Horizon 2020 directly from DG HOME
- Learning from experienced DRIVER people

- As newcomer in the DRIVER+ ecosystem, it was very interesting to meet with other actors and directly with CM practitioners, and to have a chance to discuss with the team at ARTICC
- Room Preparations were excellent
- Wide variety of topics and expertise present. Good choice of venue. Staff / Event Organisers were very helpful
- Practitioner improvement
- Second day conferences Industrial partners booths
- Good mix of people. Great panels.
- experiences from other participants
- Good venue, well organised and suited for the type of event and number of participants, good mixture of panels, marketplace & posters, workshops, etc.

Q7 Which parts of the event were least useful? Please explain why.

Comments

- The third panel introduction regarding the standards was way too detailed. For people without extensive knowledge on this subject, it was nearly impossible to follow or participate.
- Discussion about information sharing: too general
- Poster area. 1-side line of communication
- Standardisation panel on Day 1 - a little unstructured
- Conferences times were frustrating (we did not attend, since it seemed difficult to enter the room while the speakers were already proceeding), so overall proper interaction time was limited, but we understand it was not an exhibition, and the goal was to be introduced into the ecosystem
- 2nd day a bit too long or not enough topics on 2nd day
- Poster area should be better organized and populated. Often it was too empty.
- Poster session was a little bit left behind. It had the smaller room and not many people were there. Maybe it would have been better to have the Marketplace and the posters in a single (and larger) room

Q8 How would you rate the event in terms of overall relevance to your organisation and goals/interests?

- Excellent: 10.53%
- Very good: 52.63%
- Good: 26.32%
- Fair: 10.53%
- TOTAL: 100%

Comments

- There were not that many end-users at the conference. Mostly organizations that are involved in the research. However, we didn't know many of those yet, so that made it interesting
- Standardisation is not really a loving or unknown topic for practitioners (yet)
- Only partly relevant for NGOs
- Helped us identify potential for our solutions, meet with stakeholders, hear about current challenges/issues/practices etc in a very practical way
- The topic is relevant for my organisation, but information which I gained was not too useful

Q9 Would you recommend to partner organisations & colleagues to attend a DRIVER+ I4CM event?

- Yes: 84.21%
- No: 15.79%
- TOTAL: 100%

Comments

- But only when they are interested in the Driver+ or related research projects. For general crisis management, this event was too much focused internally
- I'd like more organisations to attend
- It was too general, and too less specific. Too few real examples.
- It is a nice get together for anyone involved in CM

Annex 3 – Evaluation of the fourth Innovation for Crisis Management (I4CM) event in Copenhagen (Denmark), June 12-13, 2019

Results of the evaluation summary

Based on the evaluation summary the event was regarded as overall highly satisfactory results while recommendations on how to further improve the event format were received from the participants.

Number of responses of participants in total: 30 responses.

Q1 How would you rate the overall logistics and the support from the organisation team for the event(s) you have attended?

- Excellent: 36.67%
- Very good: 53.33%
- Good: 10%
- TOTAL: 100%

Comments

- Great technical support on location and great location itself
- Great facility, exciting panels with varied themes
- More information on the booth set-up within the market place would have been helpful, otherwise very well organised
- Relaxed atmosphere and still everything alright
- Smooth environment, good catering and interesting location
- There were no questions during and before the event, everything was clear enough!

Q2 The event met my expectations

- Strongly agree: 31.03%
- Agree: 58.62%
- Neither agree nor disagree: 3.45%
- Strongly disagree: 6.90%
- TOTAL: 100%

Comments

- Good number of attendants, nice program. Only points are that there was no note taker in our workshop (3Di-SIM CI), so we had no presenter in the concluding meeting of Day 1 (we jumped in ourselves, but would be nice to know beforehand)
- Focus was too much on humanitarian crisis
- Good occasion to get introduced to the other DRIVER+ and similar projects participants, however this is difficult to measure how it will directly lead to sales if this is presented as a good occasion to meet with end-users (this not an exhibition)
- I had not expected the strong focus on volunteer management
- Good balance of presentations

Q3 The length & format of this event was appropriate

- Strongly agree: 41.38%
- Agree: 55.17%
- Disagree: 3.45%
- TOTAL: 100%

Comments

- As I was not interested in the aspect of humanitarian crisis it could have been much shorter.
- Problem: The term "volunteer" was understood in many different ways in the talks and workshops.
- Two full days is perfect
- A lot of presentations and interesting short course
- Lacked a bit of time for the market place. Only had time to be there during lunch, and then the room was so full and there were other conversations going on

Q4 The Agenda was very interesting

- Strongly agree: 43.33%
- Agree: 23.33%
- Neither agree nor disagree: 26.67%
- Disagree: 6.67%
- TOTAL: 100%

Comments

- I'm not that much into volunteer management
- More focus on the results of the DRIVER+ project would have been better
- Volunteer management is less of a focus for us
- It helped us understand more about the project expectations
- Not too many parallel sessions is a good way to keep the workshops full of participants
- Agenda well-fitting with meeting topics
- Some was very interesting (about psychosocial support) other was a bit hard to understand if you did to know about the topic before.

Q5 Enough time for discussion and queries was provided

- Strongly agree: 13.79%
- Agree: 72.41%
- Neither agree nor disagree: 13.79%
- TOTAL: 100%

Comments

- Could have wanted more interactive sessions. More room for q&a
- Always given time to questions or public discussion
- The time is always limited :)

Q6 What were the strengths of the event? What did you find most useful?

Comments

- Good group of attendants, both in amount as in speciality - Great that we (solution providers) had the opportunity to organise a workshop. - Nice to have the opportunity to show ourselves at the marketplace
- Workshop-format
- The combination of DRIVER+ and the humanitarian field
- As partner in the DRIVER+-project there was not much new to me, and several parts that were far beyond my scope of interest
- Inspirational Talk by Jaz O'Hara Talk: DRIVER+ Sustainability & Centre of Expertise Toolkit
- The strengths of the event were all the new perspectives and the informations regarding the volunteers. Most useful was the reminder that volunteers must be cared about too
- Gain an overview of the different DRIVER+ aspect and who to contact for them

- The wide variety of volunteer related issues
- That the workshop was long - it was great to have the opportunity to get a thorough introduction to PFA
- An important overarching theme with very nice and varied panel sessions. Great facility and professional organizing
- Meeting the consortium partners again
- Meet with different stakeholders (project related and other projects related)
- Strong involvement of practitioners focus on "soft" aspects, not just hard ware
- Talks on connection between volunteer management and technical solutions in crisis management
- Well organised and balanced. Useful were the training on PFA
- Bilateral talks
- Interdisciplinary of participants
- Time for networking
- It was great that I could get in touch with some practitioners. Useful thoughts were shared and some interesting perspectives discussed
- Talks and panel debates
- Workshops and PSS sessions
- The diversity of participant + the topic was on point!
- The coming together of people from different fields and backgrounds that don't normally meet created a lot of really interesting discussions

Q7 Which parts of the event were least useful? Please explain why.

Comments

- Beforehand I expected a bit more interested parties/attendants at the marketplace. Serving the lunch at the same location was good, but most attention goes to the lunch at that moment. Arrival time in the morning and the morning coffee break prove often to be more worthwhile.
- I think it was a problem, that the plenary sessions didn't followed the time table
- The (very large) parts about humanitarian crisis
- Interview on stage: Volunteering and Mental Health and Psychosocial Support in Crisis Management - not very enlightening
- I think that all parts of the event were useful for someone
- Unfortunately, many of the participants seemed less interested in the networking aspect of the event. In spite of the nice opportunities provided by the host committee
- The market place: there was no dedicated timeslot to attend the booths. It was always overlapping with either other sessions or lunch
- It was long and intense days, with interesting topics and talks. Perhaps, the days could be shortened by one hour or so to keep enough energy for all events
- Perhaps the fact that conference members had the occasion to visit exhibitors mostly during lunch time was a bit placing exhibitors in an awkward situation but at least it was giving them the opportunity to visit (compared to previous edition). No so many external to projects visitors though
- Some of the DRIVER+ talk was hard to understand for externals
- DRIVER+ explanations, because I know the project already
- Motivation speeches; do not provide any value
- The time for networking
- The very technical presentations - and to short presentations of tools (societal impact)
- Discussions on a stage about voluntary service (especially within UN perspective) were promising but finally not interesting
- Some of the DRIVER related content was a little too internal

Q8 How would you rate the event in terms of overall relevance to your organisation and goals/interests?

- Excellent: 33.33%
- Very good: 23.33%
- Good: 36.67%
- Fair: 6.67%
- TOTAL: 100%

Comments

- Nice to understand more about projects' goal and have the occasion to speak directly
- The CMINE initiative has been growing through the event
- Well introducing further discussion in C-MINE volunteers management

Q9 Would you recommend to partner organisations & colleagues to attend a DRIVER+ I4CM event?

- Yes: 88.89%
- No: 11.11%
- TOTAL: 100%

Comments

- If working in the field crisis management, the Driver+ community is a very interesting group to be part of
- The focus of the event was focussed very much inward for Driver+
- But only if they want to know more about improvement of the crisis management
- If they have technical interests

Annex 4 – Roadmap Document Task Group Floods

Introduction

In the event of an imminent flood, all kinds of choices are made to reduce both the probability and the consequences. If we know the water level predictions and if we have knowledge of the strength of flood defences, we have an impression of the chance the flood could occur. With the help of scenarios (results of flood modelling) we have insight in the consequences. The effects of measures can also be calculated with these models. In practice, however, to be able to arrive at better information in terms of risk reduction, different interpretations need to be done. There is no standard way yet to reach this goal and to acquire objective results.

Objective risk reduction information can be helpful in, for example, extra implementation time for measures that reduce the consequences. In addition, the question is how we can better support and advice decision makers: do they want to reach the goal to reduce the chance of a flood occurring, or is the goal to reduce the risk? Because the goal is not the same, it can lead to other prioritization of measures.

In this Task Group we want to elaborate a new and concise method to reproducibly and recognizably estimate the effect of a measure on the basis of expert knowledge and thus quantify the risk reduction.

The scope of the Task Group Floods will be to develop a tool and demo's for different countries on predictive operational information for conditional flood risk management⁵.

In this Roadmap Document for the Task Group Floods the goals and rationale for the Task Group are outlined, addressing the following items:

- Goal: what does the Task Group ultimately aim to achieve?
- Relevance and context of the Task Group: why is this an acute challenge that needs to be tackled now?
- Task Group composition: description of the different members and their background
- Roles and responsibilities
- Work process: how will the Task Group ensure it reaches its goals successfully and in time?
- Foreseen meetings
- Foreseen reports
- Potential synergies with other themes/Task Groups and external stakeholders that could benefit from the Task Group Work

The Theme Chair has coordinated the development of the Task Group Roadmap:

- Initial draft: 19 March 2019
- Final version: 30 April 2019

⁵ Conditional flood risk management (Kolen et al., ICOLD 2019)

Task Group participants

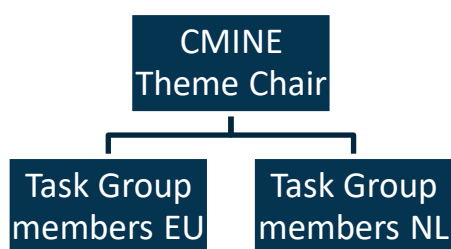


Figure 2.1. Task Group Floods structure

The Task Group Floods is led by Hanneke Vreugdenhil and Bas Kolen (HKV) and composed of the following experts:

Table 2.1: EU members of Task Group Floods

Name	Country	Function	Organisation
Antoni Rifa Ros	Spain	Chief	Catalan Fire Service Brigade
Orlin Nikolov	Bulgaria	Director	Crisis Management and Disaster Response Centre of Excellence
Carmen Castro	Spain	Policy maker	Centre of Security and Emergencies and Valencia Local Police (emergency management)
Leskó György	Hungary	Researcher	Doctoral School of Military Engineering, National University of Public Service
Kim Lintrup	Denmark	Executive director and Chief Fire Officer	Fire and Rescue Service Frederiksborg
Ralf Hedel		Head of Team Risk modelling	Fraunhofer Institute

Table 2.2: Dutch members of Task Group Floods

Name	Organisation	Contribution	Mail
Marcel van der Doef	Waterboard Brabantse Delta	Continuous insight, practitioner	m.van.der.doef@brabantsedelta.nl
Evert Hazenoot	Waterboard Rivierenland	Continuous insight, practitioner	E.Hazenoot@wsrl.nl
André de Rond	Safety Region Haaglanden	Trial 4 Host, practitioner	andre.de.rond@vrh.nl
Roelof Moll	TU Delft	H2020 BRIGAD, practitioner	j.r.moll@tudelft.nl

		researcher	
Ludolph Wentholt	STOWA	Continuous insight, policy maker	wentholt@stowa.nl
Jaap van der Veen	Waterboard Zuiderzeeland	WAVE2020, practitioner	j.vanderveen@zuiderzeeland.nl
Martin Nieuwenhuis	Waterboard Rijn and IJssel	WAVE2020, practitioner	m.nieuwenhuis@wrij.nl
Jan van der Lingen	Waterboard Hollands Noorderkwartier	Asset management, practitioner	j.vanderlingen@hknk.nl
Raymond de Landmeter	Waterboard Hollands Noorderkwartier	Crisis management, practitioner	R.deLandmeter@hknk.nl

Goal of the Task Group

The goal of the Task Group will be to visualize and improve the effectiveness of emergency measures related to flood risk management (risk = probability x consequence). Flood management exercises are often focused on flood probabilities⁶, flood preventative measures (to reduce probability) and flood risk (limited awareness). With the CMINE task group, we would like to add emergency measures⁷ (evacuation etc.) and show effectiveness on a flood risk map⁸. This map should be available for decision makers and their consultants⁹. There is a need to explain and visualize (calculated) flood risk to determine the effectiveness, advantages and accountability of centralized or regional investment on flood risk management measures. Our challenge will be to develop an international worldwide approach to measure the effectiveness of flood measures and an effective and efficient use of open data (like water levels, levee information, flood scenarios, alarm levels, critical moments, possible risk reduction measures per zone or area).

The challenge of the task group has already been mentioned as one of the DRIVER+ gaps (see **D922.11**, gap # 1, p. 6, with more detailed description on pp. 35-36). This gap is related to the challenge to reduce the

⁶ Describing Concurrent Flood Hazards in a Risk Assessment Decision Framework Using a Bayesian Network Methodology (Åström et al., 2014)

⁷ Risk-based decision making for evacuation in case of imminent threat of flooding (Kolen en van Gelder, TU Delft, 2018)

⁸ Examples of risk maps that mainly show the current risk (hazards), but no risk reduction, can be found at

www.climatetechwiki.org/content/flood-hazard-mapping

www.deltares.nl/en/projects/development-of-a-flood-early-warning-system-and-an-adaptive-flood-risk-management-plan-for-sukhothai-district-yom-river-basin/,

www.sara-tx.org/flood-management/riskmap/

www.dutchwatersector.com/news-events/news/11666-new-dutch-20-billion-euros-flood-programme-introduces-risk-based-standards-for.html

www.stowa.nl/deltafacts/waterveiligheid/delta-facts-english-versions/floods-directive

⁹ Of course an interactive map should be hosted somehow. For the demo versions it will be hosted by HKV consultants. In case after some time a marketable product should evolve from it, hosting should also be reformulated.

risk by assessing the effects of measures¹⁰: “To enhance response operations [...], there is a need for fast and accurate assessment of the concerned territory at the pre-event and response phase (for the incident-specific attributes that cannot be anticipated at the planning phase). Detailed forecasts and models (predictive modelling capabilities) need to be produced in real time with incident-specific variables. The incident commander needs to understand both the current situation, and how it will evolve (crisis dynamic). Time is a critical factor.”

What will be produced as a result/product of the Task Group Floods is the following:

- An interactive map in which the conditional flood risk is demonstrated. Measures can be selected and immediately the effect/impact on the flood risk is shown. This map can be used in operations and/or as a decision support information systems. In case no water level measurements are available a demo will be developed, to demonstrate the possible use of the tool.
- A description the stepwise elaboration of the assessment of effectiveness of measures to the flood risk, with the help of expert judgment sessions, inspired by a Delphi approach¹¹.
- A list of recommendations for further developments and issues to be elaborated.

Task Group Composition and Rationale

Number of task group members: 15

Number of countries involved: 6

- Spain (2)
- Germany (1)
- Hungary (1)
- Bulgaria (1)
- Denmark (1)
- The Netherlands (9)

Different types of members:

- practitioners (10)
- policy makers (2)
- researchers (3)

Different organizations:

- General Crisis Management (2)
- Police (1)
- Water Authority (6)
- University /School /Research Centre (4)
- Fire/Rescue (2)

¹⁰ The focused in this gap is on decision making in case of chemical threats where preparation time is not available. Nevertheless it is relevant for floods, because time is also critical and modelling and risk assessments play an important role in evolving crises.

¹¹ Hurricane Harvey Report: A fact-finding effort in the direct aftermath of Hurricane Harvey in the Greater Houston Region (Sebastian et al. TU Delft, 2017)

Relevance of the Task Group challenge

Water authorities with a flood prone area, protected by levees, work on the protection against flooding but also at possible consequences when protection fails. They need to have an overview of how risks and effects/consequences can be reduced. In a risk approach the acceptable probability of failure per year of levees is determined based on the 'acceptable risk'.

During operational flood risk control the 'failure probability per year' is not key information. In real life (actual situation) measurements and forecasts describe the conditional risk (based on available knowledge and information for low frequent assessing and designing of levees, given forecasts).

With the Task Group we would like to focus on risk based flood control. Choices in day-to-day work processes such as inspection, maintenance, operational management can be optimized based on the conditional risk. The same applies for flood fighting, warning and evacuation. All processes are fed from a single point of truth of information (which is dynamic). The water manager is in control and reduces the risk effective.

We distinguish 3 steps to define conditional risk and the conditional probability of failure (see Figure below):

1. Data

The data describes characteristics of levees, geotechnical parameters, flood scenario's, etc. Data for the demos to be developed in the Task Group should be provided by the Task Group members. In the Task Group we will use the open accessible data from EU-flood directive websites/databases. If specific data is not available for the demonstration and the expert judgment sessions (see step 2) we will use assumptions.

2. Knowledge

The knowledge transfers data into information. This can be done by models based on algorithms (if available) but also by expert judgment (the human assessment) to correct for biases and unforeseen consequences. With knowledge, data can be combined and information is generated. These expert judgment sessions can be seen as workshops or table top sessions, based on provided information.

3. Operational information

This is the result and input for daily flood control. Because of the different stakeholders involved in operational flood risk control, the presentation of the information differs per end user. A decision maker for evacuation for example, is interested in the actual probability of failure of levees, while a flood fighter is more interested in the conditional probability of failure for the next days and the relevant mechanisms of failure (e.g. seepage or overtopping).

In the Task Group we are going to develop different demos for different countries, based on EU Flood Directive open data and a list of (local) measures. As an example the conditional probability of failure and conditional flood risk is presented. The conditional probability of failure can be defined and be shown on a map in which the alarm categories are presented for all levee sections. The visualization of the risk is important to support different work processes. For the assessment of low frequent events related to the levees limited to no experience is available and we might need to look for more detailed (technical) information. For other situations the alarm category might be sufficient information. The use of categories, which represent a bandwidth of the conditional probability or conditional risk, also makes the outcomes more robust for sensitivity in data or knowledge.

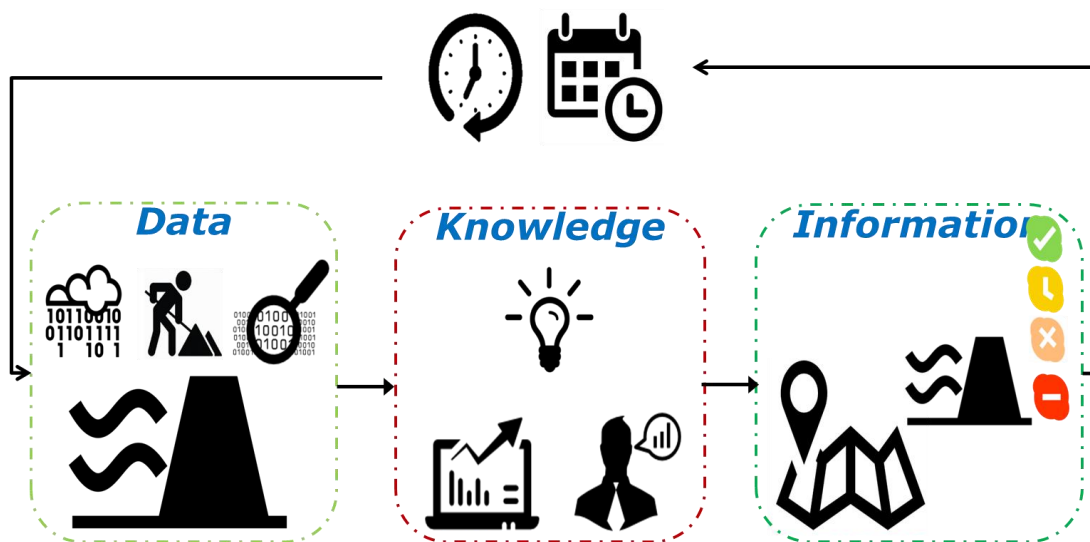


Figure 5.1.: Result generation

In the Task Group we develop a way of working (fitting in organizational procedures) that makes use of existing data and adds expert judgment to assess the effects of measures (how it influences the flood risk). The output is relevant for those people involved in crisis management who usually give advice to decision makers. With this innovation they will be able to produce a fact- and expert based advice.



Figure 5.2: Flood risk model

(information and figures have been extracted from paper ICOLD conference Kolen, Zethof, Thonus)

Roles and responsibilities of Task Group

Roles and responsibilities

The members of the Task group will be divided in:

- NL member group
- Other EU-countries

This was decided for logistical reasons, and NL-member group will therefore only send a selected delegation to international Task Group meetings. For the rest the Task Group members all have an equal position. Some might be able to spend more time and effort on elaborating on the task, while others will mainly review drafts and will be asked to comment on results. This may vary along time.

HKV provides the Theme Chair, Hanneke Vreugdenhil. She receives overall guidance in developing the Task Groups. She is responsible for elaborating the task, organising the meetings and reporting. The co-chair Bas Kolen will content wise coordinate and support the development of the products.

The Head Chair will be mainly responsible for communicating the strategic agenda of the CMINE, coordinating the efforts of the different Theme Chairs, identifying potential for synergies and collaboration and steering the direction of the themes when necessary.

Meetings

The exchanges between the Chairs and the Task group members take place both in-person and virtual. The interviews and kick off have been virtual meetings (NL members present, other members working with Video Conference provided by HKV Consultants). All Task Group meetings are already planned. All other meetings will be virtual and will be announced early enough to be prepared.

Other topics and discussions at theme Floods

Every CMINE member is able to engage in or start discussions related to a specific theme on the theme level without having to become a member of a Task Group. From the discussions held at the theme-level, a Task Group could potentially be established. Every Task Group Floods member should feel free and will be encouraged to raise any other topic in the Flood theme.

Work process

The work process of the task group will be a balance between the exploratory and consolidatory work, thus ensuring a development process that is both democratic and well-grounded in current and actual challenges for flood risk management.

The Task Group will mainly communicate by mail, Video Conference and Face to Face. The COCP will be used for communication and information exchange with the CMINE network about the Task Group results. The CMINE will in this way act as the online “meeting place” for members of the Crisis Management Innovation Network Europe where Task Group members can interact and share knowledge, experience and best practices. It will facilitate discussions with experts from other fields and might provide additional tasks to be elaborated in (near) future Task Groups.

Virtual Kick-off meeting and working period 1

To make optimal use of the capacities and experiences in the task group the work already has started with a (live and virtual) co-development session on March 8th to describe the main problem and expected outputs that the group will tackle. The kick-off meeting took place in Delft (HKV premises for Dutch

partners) from 10:15-12:00 and has been followed by Video Conference (EU partners). During the meeting we have built on and developed further the goals and relevance sections contained in this document.

F2F meetings in working period 2

The first F2F meeting has been held in March 28th in Brussels (Ecorys premises) from 10:30-13:30. We have elaborated more in detail on the goals and the specific problems we want to solve in the Task Group. The first part was meant to get to know each other, and the second part has been dedicated to the content of the task (problem development session).

The second F2F meeting is to be held in June 2019, possibly in conjunction with the I4CM event on crisis management in Copenhagen on 12 and 13 June 2019. We will organize a consolidation workshop: the task group will first present and discuss the problem in more details and will review the first results of the elaboration of the task.

The goals of both F2F meetings is to revisit the original the problems to expand and/or complement them with additional problems identified in the course of the sub-groups' work. As in the kick-off meeting, the task group will complete a process to identify a new set of sub-problems to tackle, and to form new sub-groups around these sub-problems. The task group may decide to develop wholly new sub-problems or to develop sub-problems that build and expand on the sub-problems already identified, or both.

This second working period is used to allow synergies with the Trial The Netherlands (May 2019). During the trial the main task is to specify flood risks and to determine and prioritize mitigating measures. Expertise will be found and their risk assessments can be input for the Task Group. During the trial the EU-policies on flood risk reduction will be discussed, and be followed by policy recommendations from the practitioners point of view.

F2F meetings in working period 3

The next F2F meeting follows the same structure as the first F2F and consists of a consolidation workshop and problem-development session. This meeting will take place in September 2019 (location to be discussed).

This F2F meeting will also encompass a third goal, namely to tackle how the task group engages with a wider set of stakeholder and audiences. This could entail sending any position papers that have come out of the working periods to review or to develop work already completed into articles for the general audience.

A balance between developing papers on further sub-problems and engaging with a wider public will have to be struck and will need to be carefully coordinated with SP95 work overall.

Finally, this F2F meeting will also be dedicated to preparation for the D+ Final conference and to defining the preparatory work needed to engage successfully in that arena.

Working period 3 will run up to the D+ final conference.

DRIVER+ Final conference

The final F2F meeting is dedicated to final consolidation of the task group's work and to preparing for the D+ Final conference, where the group expects to present its key outputs.

Task Group Meetings

In this chapter you will find an overview of all foreseen meetings (virtual and physical) and the reports or other working documents you are intending to create (next to the official reports).

Table 8.1: Task Group Floods meetings

Year	Action	Date
2019	Kick off Meeting	March 8th
	Agenda for 1st F2F circulated to task group	March 19th
	Draft final road map incl. task group input	March 19th
	Theme chairs meeting at CoU Brussels	March 27th
	1 st F2F meeting in Brussels	March 28th
	Minutes of F2F to task group and head chair	April 5th
	Teleconferences to discuss the work	April
	CMINE chairs meeting, Copenhagen	June 11th
	2 nd F2F meeting (location to be discussed)	June
	Minutes of F2F to task group and head chair	June
	Teleconferences to discuss the work	July
	Input to D953.13 Enhancing the shared understanding of CM	Before half of July
	Teleconferences to discuss the work	Aug+ Sept
	CMINE chairs meeting at CoU Brussels	Sept
	3 rd F2F meeting (location to be discussed)	Sept
	Minutes of F2F to task group and head chair	Sept
	Teleconferences to discuss the work	Oct-Dec
2020	Teleconferences to discuss the work	January
	Draft final D+ final conference presentation to theme chair	Feb
	Draft final master presentation at D+ final conference developed and shared with task group	Feb
	Participation and presentation at D+ final conference	Feb
	Contribution to D953.14 Enhancing the shared understanding of CM – Final report and way forward	Feb
	CMINE annual report	March
	CMINE final task group report	March

Synergies with other themes

With Task Group Wildfire we share the difficulty of handling risks. No one knows where and when a flood will occur, no one knows where and when a wildfire will start and evolve. In both themes we use models to predict more or less the progress of the flood or the wildfire, but the reality might differ immensely. Task Group Floods will elaborate the effects of measures on the flood risk. Task Group Wildfire might benefit from the way of working (process, data collection, visualisation) and possibly from the results (real time insight in seizing risks).

With Task Group Volunteer Management we share the difficulty of (un)expected behaviour of people in crisis management. Not yet in the topic of flood risk management, but maybe in another topic being raised in the first year of CMINE, we might cooperate on how to make sure that people do exactly their tasks, varying from high level decision makers to volunteers working locally in the field. We would like to elaborate on 'risk based working' in the flood management. So in this topic we might benefit from results of Task Group Volunteer Management.

Links with other EU-initiatives and academic developments:

- IMPRESS: medical location-aware decision making during emergencies (Hedel)
- EU-CIRCLE: Critical infrastructure and Resilience to climate change: an innovative framework for supporting the interconnected European Infrastructure's resilience to climate pressures, supported by an end-to-end modelling environment (Hedel)
- Building resiliency and mitigating vulnerability in the Balkan Region: Implications of Climate Change and Disasters on Military Activities (Nikolov)
- Support for crisis and disaster management processes (Nikolov)
- DAREnet: Danube river region resilience exchange network on flood Warning, forecasting and emergency response (Lesko)
- Internationally Coordinated Flood Risk Management Plan for the International River Basin District of the Rhine (Nieuwenhuis, Hazenoot, Dutch and German water authorities)
- Reduce flood risks by compartmentalisation dikes (Kolen, Wentholt, STOWA)
- Real time flood risk management (Hazenoot, Kolen)
- Kring (network of coastal engineers): Flood events, how to cooperate? Lessons learnt from the UK (HHNK, de Landmeter)

Annex 5 – Roadmap Document Task Group Wildfires

Executive summary

CMINE WILDFIRE Task Group is a pilot initiative until February 2020 during which ten (10) selected members of the task group and independent reviewers knowledgeable in the field of wildfire management will work together with the Task Group Chair. There will be appointed two Vice Task Group Chairs who will help with topics selection and work organization within the group. Every member is an expert coming from the field of policy makers, practitioners and private companies from forest fire propagation services, forest engineers, firefighters and academia. They will help the Task Group Chair to elaborate a common expert view of what can be done with sets and directions towards “guidelines” for policy, science and practice, based on expert opinion and expertise (Annex 1) that will provide easy to understand and implement good practices and lessons learned in the wildfire everyday work environment for the involved stakeholders.

Suggestions about possible policy changes in fuel/landscape management for prevention, mitigation and preparedness in cases of wildfire occurrence will be also discussed.

Suppression measures and their pros and cons will be summarized, but more attention will be put in the prevention and preparedness measures promoting the vision of “resilient landscapes – adapted/agile communities – adequate response”.

Task Group participants

The Task Group is led by Nina Dobrinkova, Assoc. Prof. Dr. in IICT-BAS (wildfire modelling specialist) and composed of the following experts:

Table 2.1: Task group members

Name	Country	Function	Organisation
Alexander Held	Germany	Vice Theme Chair Wildfires Senior Expert (Forest Fire and Silviculture)	European Forest Risk Facility (@ EFI)
Chuck Bushey	USA	Vice Theme Chair Wildfires	International Association of Wildland Fire, National Wildland Fire Management Cohesive Strategy, Fire Ecologist and Fire Behavior Analyst with Montana Prescribed Fire Services, Inc.
Marc Castellnou	Spain		Pau Costa
Cathelijne Stoof	The Netherlands	Tenured Assistant Professor (Soil, Water, Landscapes, Fires)	Wageningen University
George Boustras	Cyprus	Director and Dean	Centre for Risk and Decision Science (CERIDES) and Ioannis Gregoriou School of Business Administration
Georgios	Greece	Environmental Planning,	KEMEA

Name	Country	Function	Organisation
Eftychidis		Forester, Policy Maker, Disaster Management	
Ciaran Nugent	Ireland	Forest Engineer	Irish Forest Service
Craig Hope	UK	Lead Wildfire Officer	South Wales Fire and Rescue Service
Carlos Trindade	Portugal	Forest Engineer, Wildfire Management, Civil Protection Officer	
Adrián Cardil Forradellas	Spain	Forest Engineer	Private Company for forest fires modelling solutions representative

Table 2.2: Reviewers of Task Group Wildfire

Name	Country	Function	Organisation
Peter Moore	Italy	Forest Officer in Forest Fire Management & Disaster Risk Reduction	FAO-Forestry Department
Alice Clemenceau	France		Valabre
Rob Testelmans	Belgium		
Dejan Radović	Serbia		

Goal of the Task Group

Worldwide, the number of wildfires as well as the total amount of burnt area is increasing every year. This results in losses of human lives, property and hectares of burned forests. In 2018, forest fires occurred in countries like Sweden, Germany and Poland, which is not a common natural hazard on their territories. Fire is frequently a part of a natural cycle within the forests, but the fires we have seen in recent years are no longer natural as they are influenced by human activities. Additionally, restoration of productive, bio-diverse and resilient forests is becoming more and more difficult.

The main goal of the CMINE Wildfire Task Group will be the creation of a common expert view of what can be done with sets and directions towards “guidelines” for policy, science and practice, based on expert opinion and expertise. Recommendations will be generic and not elaborated in detail due to limited time and funding. Thus, we will try to organize all expert knowledge in a way that will address all observed shortcomings in practice in summarised manner.

Further, this task group aims at changing the fire management paradigm, shifting the focus more on prevention than on mitigation of the unwanted effects of fires. This group is promoting the SENDAI framework recommendations as well as the recommendations of the EU Commission report called “Forest Fires, Sparking firesmart policies in EU” available at the link: <https://resilience-blog.com/2019/02/28/sparking-firesmart-policies-in-the-eu-lets-train-together/>. Again, the new focus is on

prevention, and including the land-based sector in the complex topic of managing fires in a changing climate.

A new fire management paradigm will need a shared and mutually agreed objective that is providing strategic direction for all concerned stakeholders across disciplines and sectors.

Task Group Structure, Roles and Responsibilities

The Wildfire Task Group Structure will consist of a Task Group Chair, two Vice Task Group Chairs, Task Group members and Task Group Reviewers. The following diagram presents the general structure of the Wildfire Task Group:

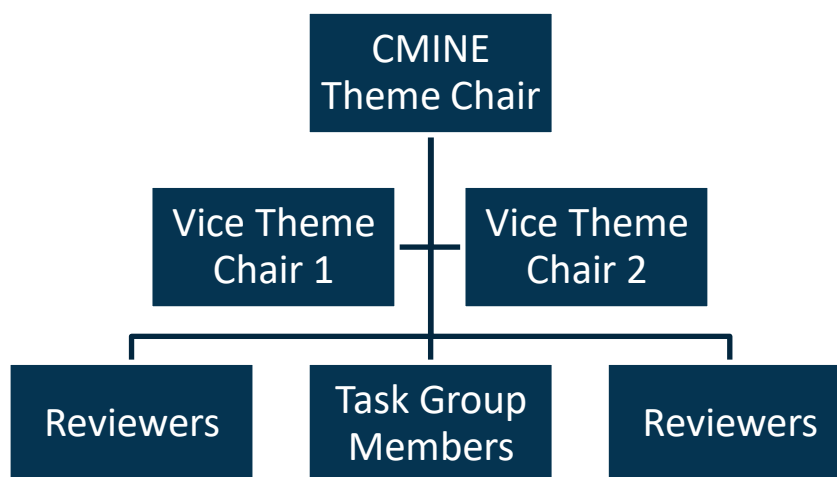


Figure 4.1: Task Group Wildfires structure

The Task Group Chair is the person who will communicate with all Task Group Members and Reviewers. Two Vice Task Group Chairs have been selected from the Task Group in order to easily facilitate the Task Group management. The official communication and official documents, which the group members and reviewers will discuss and produce, will be presented to the CMINE Support Office and Steering Committee through the Task Group Chair. Organization of the F2F meetings and online discussions will be hosted by the Task Group Chair. Any organizational matters for the task group members, which need the attention of the CMINE Support Office, will be done through the Task Group Chair.

Task Group members are ten (10) people with different backgrounds covering the expertise of policy makers, practitioners, private companies from forest fire propagation services, forest engineers, firefighters and academia. The Task Group Members are representatives from the states of Spain, Greece, Cyprus, Ireland, Germany, UK, Portugal, US, and the Netherlands. The Task Group Members have as their main duty to present their opinion as experts in the field of wildfires suppression measures, fuel management and fire propagation simulation tools and any other related topic that may help in building of a common expert view of what can be done with sets and directions towards “guidelines” for policy, science and practice, based on expert opinion and expertise with suggestions on improvements in the field of wildfire prevention/preparedness, detection and suppression measures.

Task Group Reviewers have as their main duties to assess and suggest to the Task Group and the Task Group Chair any points of view which are somehow missing from the written documents or the online discussions. The Reviewer position is also combining the advisory function to the Task Group Chair and members. This is needed because the Task Group Chairs by themselves cannot have all points of view and critical view at the same time. Thus, the third opinion outside the main group will have corrective type of functions. Reviewers can participate in the task group meetings, but no funding from CMINE will be provided for their costs.

Responsibilities to every Task Group Member and Reviewer will be to answer emails, be present at online or F2F meetings (only for Task Group Members F2F meetings is requested) after preliminary communication with the Task Group Chair for a mutually convenient time. Suggestions, reviews and changes to documents need to be presented to the Task Group Chair in written form either via email texts or written files with the relevant information for the discussed topic. Changes in schedule of bilateral online sessions can be done via email messages. Task Group online meetings after scheduling via DOODLE pool can be skipped if email request to the Task Group Chair is sent.

Relevance of the Task Group (research) challenge

Catastrophic wildfires are occurring under extreme weather conditions more often now than in the previous 30 years. This is a huge challenge for fire suppression capabilities in many countries. Every year vast areas in hectares of forests are burned, damaging and destroying urban zones and ecosystems. We can increasingly observe that traditional fire suppression response is failing, and fires are not being brought under control as quickly as before, or not at all. A new approach of integrated fire and land management is needed. Continuing business as usual, i.e. investing most of the fire budgets into fire suppression, is putting human lives at risk.

In the last three years, the European Commission is publishing data about increasing numbers of wildland fires all over Europe. In 2018 the Copernicus Project services monitored air temperature anomalies that clearly showed northern European countries are not safe when it comes to having wildland fires on their lands. Further, in terms of available biomass, central and northern Europe have much higher fuel loads than the Mediterranean countries, unfortunately. 2018 was a clear example for this. The modelling of climate change anomalies done in the research field is giving indications that air temperatures will continue to increase, along with the probability that the number of fires will also increase in the years to come.

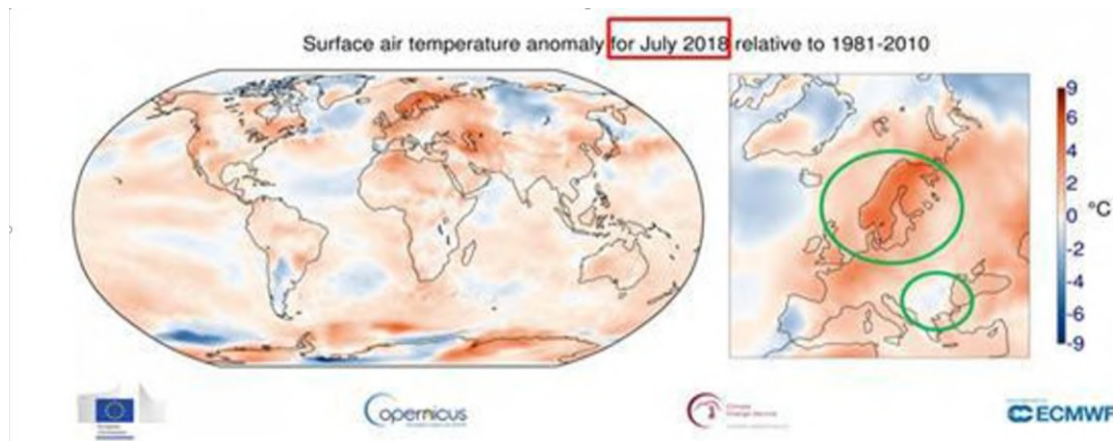


Figure 5.1: Temperature anomalies by Copernicus data July 2018 based on average data from 1981-2010

A possible solution on EU level when it comes to wildland fire prevention and preparedness/suppression measures, is that people from the field start working together to identify:

- Suppression Measures, primarily in the experience of firefighters, incident commanders and civil protection groups
- Measures in the land use and land management sector, namely forestry, farming and agriculture. This sector has direct influence on the availability of vegetation fire fuel and the fuel's composition, etc.
- Solutions from academia, e.g. research laboratories dedicated to fire propagation modelling and suppression measures' calculations
- Solutions provided by the governmental sector, such as ICT tools providers based on Copernicus Sentinel data Hubs, US Forest
- Tools by Service Fire Sciences Laboratory (Missoula, Montana, USA), e.g. models and research tools like FARSITE, BEHAVEPlus, WindNinja, FlamMap etc., Meteorology organizations for Weather Services, and others.

- Fire Awareness education in terms of “FireWise” behaviour, construction etc., by NGOs, EU and national government bodies
- Good practice examples, mutual support, training and capacity building by non-formal networks of individuals and groups in the fire management community.

These types of organizations should combine their efforts and start working together by utilizing all satellite, sensor and local data available in order to better predict and make propagation simulations in cases of extreme events. We live in the 21st century and tools from all sectors can and should be used to help firefighters and civilian populations to be protected when the situation is warranted.

Work process

The work process of the Task Group is presented in the diagram.

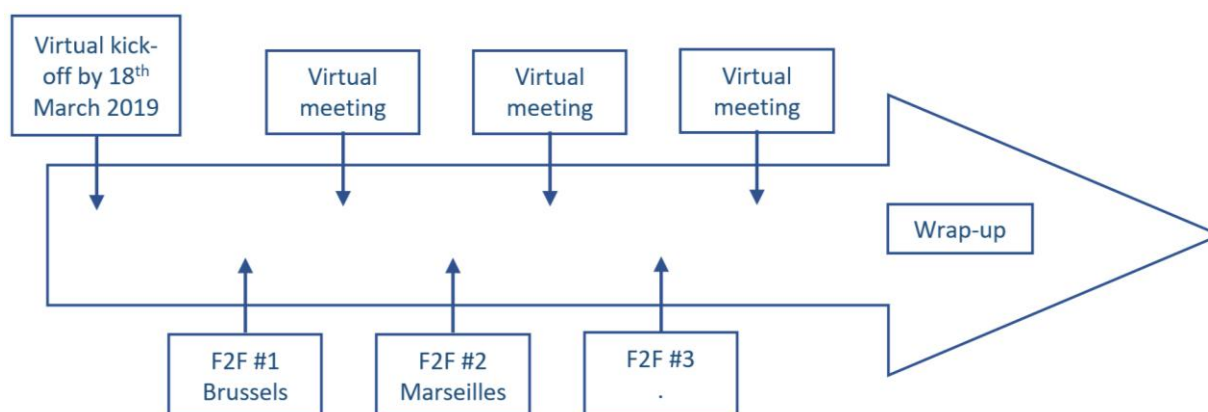


Figure 6.1: Work plan for the Task Group on Wildfires

Virtual Kick-off meeting

To make optimal use of the capacities and expertise in the Task Group a virtual kick off meeting has been organised on 18th March 2019. Any organizational needs for the first F2F meeting will be discussed, communication channels between the group members will be proposed and content for the road map themes will be suggested.

First F2F meeting in Brussels 26 March 2019

The first F2F meeting consists of a consolidation workshop and problem-development session, to be held on 26 March 2019 at Ecorys premises in Brussels in conjunction with the 13th Meeting of the Community of Users on Secure, Safe, Resilient Societies.

Second F2F meeting in Marseille

The second F2F meeting is planned to be done in Marseille on 29 April 2019. It will be a back to back meeting with the IAWF 6th International Fire Behaviour and Fuels Conference in Marseille.

Third F2F meeting (to be defined)

The third F2F meeting plan is to be done after the 2019 fire season and the exact location will be settled during the 2nd F2F meeting in Marseille.

Online meetings

Online meetings will be done on a regular basis with the Task Group Members and Reviewers based on email discussions and on any additional need for clarifications about the Task Group Work and Reports.

1. Task Group Meetings and Reports

Table 7.1: Task Group Wildfires meetings

Year	Action	Date
2019	Virtual Kick-Off meeting	By 18 March
	Draft final roadmap incl. task group input	By 19 March
	Agenda for the first F2F meeting	By 20 March
	1 st F2F meeting, Theme chairs meeting CoU-13, March BXL	26-27 March
	Virtual 30 minutes call	April
	Agenda for the second F2F meeting	By 20 April
	2 nd F2F meeting in Marseille	By 1 st May
	Virtual 30 minutes call	May
	Virtual 30 minutes sub-group calls (if needed)	July
	Virtual 30 minutes sub-group calls (if needed)	September
	Agenda for the third F2F meeting	By 20 October
	3 rd F2F meeting	By 2 nd November
2020	Virtual 30 minutes sub-group calls	January 2020
	Final task group report	March 2020
	Reviewers online sessions (when needed)	From March 2019 to March 2020

The Wildfire Task Group F2F meetings are planned to be done on a regular basis before and after the fire season in order to have maximum participation from the practitioner's group. The discussions are going to be oriented towards the ideas and topics written as the main objectives in the Road Map.

The virtual kick-off of the Wildfire Task Group is going to be on March 12th with online tool ZOOM. The discussions and chat are going to be recorded for easier reporting. Reviewer's sessions are going to be done online during the lifetime of the CMINE WILDFIRE Task Group.

Planned periods for meetings are the end of March for the first F2F meeting which will be the official kick-off of the Task Group work. Date for the first F2F meeting was on 26th March and the location was in Brussels.

The second F2F meeting is going to be in Marseille, France as a back-to-back meeting with the IAWF 6th International Fire Behaviour and Fuels Conference. In between both meetings will be an exchange of emails with the group about formulation of the common expert view of what can be done with sets and directions towards "guidelines" for policy, science and practice, based on expert opinion and expertise listed in the Road Map.

ZOOM online meetings will be done every time the Task Group wants to communicate between each other. Sub-group meetings will be done via Skype if needed. Meeting minutes will be recorded after every online session.

During the fire season (May – September period) Task Group calls and emails will be exchanged with the members not involved in field work. Other channels such as "Whatsapp" group chat can be used to collect quick inputs from the members who are otherwise not available for online meetings.

Third meeting location will be fixed during the second F2F meeting in France. All outcomes and results of the 2019 fire season will be analysed and included in the common expert view of what can be done with sets and directions towards "guidelines" for policy, science and practice, based on expert opinion and expertise. The 3rd F2F meeting will wrap up all information available and then final document will be produced.

Synergies with other themes, networks, active groups in the field of Wildfires

There are many ongoing initiatives concerning wildfires in Europe and abroad. The CMINE Wildfire group can try to build synergies with other projects within the network capacity. First steps have been done in connections with projects like Sure Project (Annex 2), Medea, and with DG ECHO.

Another important synergy which does not exist yet, is the role of the EU Rural Development Programme and Common Agricultural Policy as potential drivers for fire management measures.

There is a possibility for potential synergies with the US National Fire Management Cohesive Strategy that has a specific philosophy to landscape/wildfire management based on collaboration of interested groups rather than a stove-pipe approach where the interests of other groups are given little attention. Examples of the US Cohesive Strategy can be adapted or elaborated in a way that they are applicable for the European Wildfire strategies, but skipping the "worst" practices already spotted in the US strategy. The reason for such approach is that the USA state has major experience in dealing with wildland fires plus one of the co-authors of the strategy is part of the CMINE TG on Wildfires. Translation to EU legislative framework and reality will be done based on the EU experts included in the CMINE TG Wildfire by collecting best practices from the field in their work experiences. The list of topics is provided in Annex 3.

Hence, the Cohesive Strategy philosophy is collaboration across "All Lands and All Hands." All aspects of landscape and wildfire management are improved by cross-community collaboration. The more inclusive the group and the greater the diversity of interests involved, the more likely it is to be representative of the community as a whole and to find broadly acceptable, mutually agreeable solutions. The more different sectors and disciplines involved, the higher the probability for fresh and innovative approaches. Such collaboration can help identify areas of greatest need, focus treatments for maximum benefit, increase

participation in management decisions, and provide for more opportunity to reach agreement on management practices. New collaborative groups should be encouraged and facilitated for future involvement in active management of fire and the landscape.

As a general conclusion the Wildfire Task Group of CMINE network will work during its mandate to promote the vision that “resilient landscapes – adapted/agile communities – adequate response” is the future of the Wildfire problem.

Annex 1

Suggestion for a common expert view of what can be done with sets and directions towards “guidelines” for policy, science and practice, based on expert opinion and expertise:

Resilient Landscapes, Adapted/Agile Communities, Adequate Response: A Framework for Wildfire Risk Reduction

Suggested Content of the document:

1. Purpose of the document, Goals and Objectives

Where we show that forests can contribute to the wellbeing of the planet. To really come to a new paradigm for living with fire, we suggest establishing a pan-European or at least EU Wildfire Coordinating Group that provides strategic leadership to enable interoperable wildland fire management under a shared vision and across countries, DG’s and stakeholder groups as well as different agencies.

2. Evolution of threats and vulnerabilities

Natural disturbances have increased in Europe in the last 40 years, amplified by climate change and the changes humans have made in forest structure and composition over time. The future climate trends at a global level show that global warming is unequivocal and ongoing, and stopping at well below 2 degrees C is a race against time. The energy levels in the atmosphere are rising and in future will lead to more extreme events (drought, storm, flooding, fire, pest and disease, invasive species). There are also decisive elements: change in the rural areas (less dense, not maintained any more) and in other areas, the spreading of cities in the peripheric areas of cities. So climate is of course one major elements but patterns of soil occupancy have changed.

Climate change is expected to contribute to a further increase in forest disturbances in future, at an estimated rate of increase of +1 Mill. m³ per year. They will also take place in areas which have not previously been affected. We need to learn to live with disturbances, and also learn to see them as an opportunity to change and adapt.

The new EFI Study for instance, “From Science to Policy study, Living with bark beetles: impacts, outlooks and management options” emphasises the need for international cooperation, data sharing and monitoring, as well as taking a holistic approach to disturbance management at a landscape scale, balancing between risk reduction approaches and fostering forest resilience. The traditional command-and-control approaches will not work anymore. Please see below for further information:

https://prezi.com/kztg8y06vf80/prague/?utm_campaign=share&token=6849cb365beb3d4796d0a3a03c3a32644940eb1f01c6db437d8ef92e9f728f85&utm_medium=copy

https://www.efi.int/sites/default/files/files/thinkforest/2019/Seidl_ThinkForest_web.pdf

https://www.efi.int/sites/default/files/files/thinkforest/2019/hlasny_4%20April%202019.pdf

3. Stakeholders – roles and responsibilities
4. Measures for reducing risk of wildfires
 - Landscape management and fuels
 - Community Resilience
 - Response/Suppression

4. Investment decision making (i.e. which measures to be resourced/mandated: explanation of the risk management framework; links to other policies /e.g. employment, agricultural, etc.)
5. Implementation
6. Data and benchmarks
7. Recommendations

* Boxes with “good/best practice” examples should be included, details on available data and information about USA, Australia or southern EU member states can be listed.

Annex 2

SURE Project General Information

SURE project (<https://sure.efi.int/about>) and the European Forest Risk Facility initiative <https://sure.efi.int/Riskfacility>. The project main objectives are:

1. To produce systematic cross-disciplinary scientific assessments to support both practical management and policy development to enhance the resilience of European forests. This includes the analysis of existing experience; lessons learned and good practice cases for enhancing resilience and efficient risk management as well as information on how to reduce harmful impacts of disturbances.
2. To facilitate international networking of practitioners, scientists and policy makers concerned with forest risks, their prevention and risk responses and to enhance their capacities to mitigate and manage forest related risks and to increase forest resilience. This includes networking activities and events as well as fast track sharing of experiences and knowledge during forest related risks.
3. To synthesize both practical experience and scientific knowledge into practical guidelines and policy recommendations, and to conduct targeted communication and dissemination activities that internationally communicate knowledge and experiences related to forest resilience, forest risk mitigation and forest risk management for specific target groups.

The CMINE platform can be connected to the SURE project [RISKPlatform](#), which is a virtual communication tool for the European Forest Risk community that links practitioners, academia and public stakeholders and initiates the discussion of risk-related topics and the exchange of good practices. The members of the RISKPlatform network can share documents, information on recent publications and events (link to the RISKPlatform [here](#)).

Another option for synergy is with the European Forest Risk Facility linked to the [European Forest Institute \(EFI\)](#), which has a lot of common goals with the CMINE Wildfire Task Group. Main collaborations can be done in initiatives for prevention and preparedness in cases of pests and insect damages, storm events, transnational disturbances, with profound impacts on forest ecosystem services and livelihoods. Main objectives of the European Forest Risk Facility are:

- Networking platform emphasizing the integration of disturbances and risks into day-to-day forest management in order to make forests and forest landscapes more resilient.
- Identification of needs and capacities amongst different regions and respective stakeholders while stimulating cross-boundary exchange of knowledge and expertise on forest risks.
- Fostering collaboration at the interface between science, policy and operational management (science – policy – practice interaction).
- Mobilization of specialists and expert networks to provide the needed guidance and capacities where required or requested.
- Collection of comprehensive and up-to-date information related to damage and threats to forests, identification and communication of gaps to all relevant actors.
- Exchange of lessons learned and good practice guidance as an essential input to stimulate further research, monitoring and support of management activities towards improved and adapted risk mitigation.

Annex 3

Adaptation of the US National Fire Management Cohesive Strategy Goals for the EU needs

1. Restore and Maintain Landscapes; landscapes across all jurisdictions are resilient to fire-related disturbance within management objectives.
2. Fire-Adapted Communities; human populations and infrastructure can withstand a wildfire without loss of life and property.
3. Wildfire Response; all jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

Collaboration is the Focus of the Cohesive Strategy, and is the potentially the most important “good practice” that the EU might achieve

Possible use of the prevention topics can be done in the following sections:

REVIEW – Analysis of the fire issue and identification of options for positive change

1. Analysis of fire history and damage and loss
2. Climate Patterns
3. Potential Influence on Fire Danger and Wildland Fire Events Occurrence
 - a. Extreme Fire Behaviour Events
 - b. Planning for Worst Case Scenarios
 - c. Beyond First Order Fire Effects (mortality and fuel consumption)
4. Future Research Needs
 - a. European Vegetation Communities Fire Effects
 - b. Critical Vegetation and Wildlife Species
 - c. Significant at Risk Plant Communities

RISK REDUCTION – Prevention – focusing resources on the underlying causes of fires

1. Firefighter Diversity and Harassment Issues
2. Prescribed Fire Training/Certification Framework
 - a. Legal Framework
 - b. Policy Framework
 - c. Managing for Acceptable Fire Effects
3. Natural Hazard (Fuel) Mitigation Planning
 - d. WUI Residential Fuel Mitigation
 - e. WUI Community Fuel Mitigation
 - f. Watershed and Reservoir Protection
 - g. Risk Sharing Between Responsible Government and/or Private Sector Entities
 - h. Potential Job Creation
 - i. Fuel Mitigation and Resultant Work Force Development
 - j. Prescribed Fire
 - k. Mechanical
 - l. Grazing
 - m. Residential Wildfire Insurance Policies
4. Smoke Advisories and Warnings
 - a. Establishment of Airsheds Quality Monitoring
 - b. Identification of Airport and Flight Path Smoke Issues
5. Community Wildland Fire Resilience
 - c. Sensitive Receptor Sites and Populations at Risk

- d. Community Evacuation Plans Due to Smoke
 - e. Residential Home Preparedness for Smoke Intrusion
- 6. Identification of Military Training and Ordinance Storage Areas with UXO Issues
- 7. Identification and Protection of Historic Sites
- 8. Identification and Protection of Critical Infrastructure

READINESS – Preparing to fight fires

- 1. Public Fire Prevention and Fire Danger Awareness Campaigns
- 2. Development of Community Fire Evacuation Plans
- 3. Detection
 - a. Ground Based Fire Detection
 - i. Public Call In
 - ii. Infrared Camera Detection Systems
 - b. Aerial Fire Detection
 - c. Satellite Detection and Monitoring
- 4. Shared Fire Weather Forecasts and Fire Weather/Danger Public Warnings Systems
- 5. Health and Safety Issues
 - a. Firefighter Sleep and Fatigue
 - b. Firefighter and Public Smoke
 - c. Smoke Toxicology, Firefighter Health and Community Health
 - d. Personal Protection Equipment (PPE) Contamination
 - e. Firefighter Cancer and Diseases
- 6. Standardized of Personal Protection Equipment (PPE)
- 7. Shared Fire Terminology (Language)
- 8. Standardized of Fire Suppression Infrastructure and Communications
- 9. Standardized Advanced Wildland Fire Training and Course Work
- 10. Global Standardization of Suppression Chemical Usage
- 11. Improving Cross-Border Sharing of Wildland Resources
- 12. Cross-Border and International Firefighter Educational Exchanges

RESPONSE – Ensuring appropriate responses to unwanted damaging fires; and

RECOVERY – Community welfare, Repairing infrastructure and Restoration of fire damaged landscapes

- 1. Postfire Community and Residential Recovery Plans
- 2. Postfire Commercial and Residential Structures Toxicology and Cleanup
- 3. Infrastructure Repair and Replacement
- 4. Immediate and Long-Term Population Needs
 - a. Food
 - b. Temporary Housing and Communications
 - c. Mental Health Support

Annex 6 – Roadmap Document Task Group Volunteer Management

Introduction

Across Europe and in the rest of the world, volunteers play an important role in crisis management. Some volunteers are highly specialized and embedded in a strong organizational structure with planned shifts and clear roles. Other volunteers are deployed less frequently and may have a looser affiliation with the crisis management organization. Others again are “spontaneous” volunteers. They show up when a crisis occurs and offer their support on the spot.

Global policy and practice are developing to promote the well-being of staff and volunteers. For example, UN Resolution 70/129 (2015), “Integrating volunteering into peace and development: the plan of action for the next decade and beyond,” recognizes the role that volunteers are playing in the implementation of the 2030 Sustainable Development Agenda. As such, the resolution requests that Member States and the United Nations system work together with volunteer-based organizations to enhance the protection, security and well-being of volunteers.

The nature of volunteering is changing; communities are engaging with social, humanitarian, and development causes in new ways. People do not necessarily subscribe to the idea of life-long voluntary service for the same organization but rather see themselves as agents of change in relation to concrete causes and social movement. Spontaneous volunteers can offer their services to established crisis management organizations or self-organize in ad hoc groupings with no or little organizational support.

Lines between service users and volunteers are blurring. Volunteers are often members of the affected community, and thus likely to be personally affected by the crisis to which they are responding. In social work with vulnerable groups, people who belong – or have belonged – to the vulnerable group are often recruited as volunteers. This is sensible because as peers they have a deep understanding of the needs and culture of the service users. But they may also themselves be more vulnerable.

This affects the ways in which volunteers can and should be cared for: support systems should be flexible and able to address the needs of more fluid groups of volunteers.

To address this challenge the DRIVER+ project spearheads the initiation of the CMINE. Under these auspices the task group on volunteer management has been established. This document guides the work this group.

Task Group participants

The Task is lead by Martha Bird and Louise Juul Hansen the Chairs of the Volunteer Management group which is composed of:

Table 2.1: Task group members

Name	Country	Function	Organisation
Adjmal Dullo	Denmark	Volunteering Coordinator at International Federation of Red Cross and Red Crescent Societies	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Andreas Loepsinger	Germany	Advisor, Psychosocial Support for Syrian & Iraqi Refugees and IDP	
Anna Shevchenko-King	UK	Psychologist, lecturer, deployable civilian expert with British Government	British government DCE

Name	Country	Function	Organisation
Chaim Rafalowski	Israel	European projects and disaster management coordinator	Magen David Adom
Kim Lintrup	Denmark	Executive director and chief fire officer	Frederiksborg Fire and Rescue Service
Maria Isabel de Silva	Portugal	Psychologist, Volunteer coordinator	VOST Portugal
Massimo Lanfranco	Italy	Senior Programme Officer	Regione Liguria
Nina Baron	Denmark	Lecturer at the Emergency and Risk Management program	Metropolitan University College
Serena Tagliacozzo	EC	Research and policy analyst	Joint Research Centre
Tarmo Kull	Estonia	Lecturer of Crisis Management Chair	Estonian Academy of Security Sciences
Daniel Auferbauer	Austria	Junior Scientist	AIT Austrian Institute of Technology, Center for Digital Safety and Security

Goal of the Task Group

The challenges in volunteer management are many. But one area that is largely overlooked is the provision of support and care for spontaneous volunteers.

Questions about how to provide support and care to spontaneous volunteers include:

- What are specific needs, concerns and stressors of new types of volunteers?
- How are spontaneous volunteers included in existing support structures in the organization?
- How can volunteers operating in ad hoc groupings access support and care?
- How can established organizations work with ad hoc groupings to ensure high quality work and care for volunteers?
- How can volunteer managers support volunteers who are not already part of a set structure?
- Are crisis management organizations good enough at making sure that spontaneous volunteers work in physically and emotionally safe ways?

A Task Group consisting of representatives of European and International organizations working with and through volunteers in crisis management will be established to:

- 1) Narrow in on a specific challenge pertaining to caring and supporting spontaneous volunteers;
- 2) Define gaps and challenges as well as lessons learned on support to new types of volunteers;
- 3) Develop an anthology tool book for representatives of professional organizations which are already or potentially engaging with spontaneous volunteers containing:
 - Advice/recommendations.
 - Checklists.
 - Action sheets.
 - Exercise.
 - Cases studies/good practice.
 - References to learning material.

Task Group Composition and Rationale

The task group members all have a strong track record in crisis management, volunteer management and/or psychosocial support. The group is purposefully multi-disciplinary, with diverse, specialised but also complementary skills and competencies. Thus, the group represents a mix of people with a research background, practitioners, crisis managers and psychologists. Group members come from both within and beyond the DRIVER+ project. D+ internal members will support bi-directional learning between D+ at large and the CMINE group, while external members learn from D+ while also bringing new knowledge, thoughts and experience into the project. In the below, Chaim Rafolowski, Tarmo Kull, Massimo Lanfanco and Daniel Aufenbauer are part of the D+ project and the rest of the group external to D+.

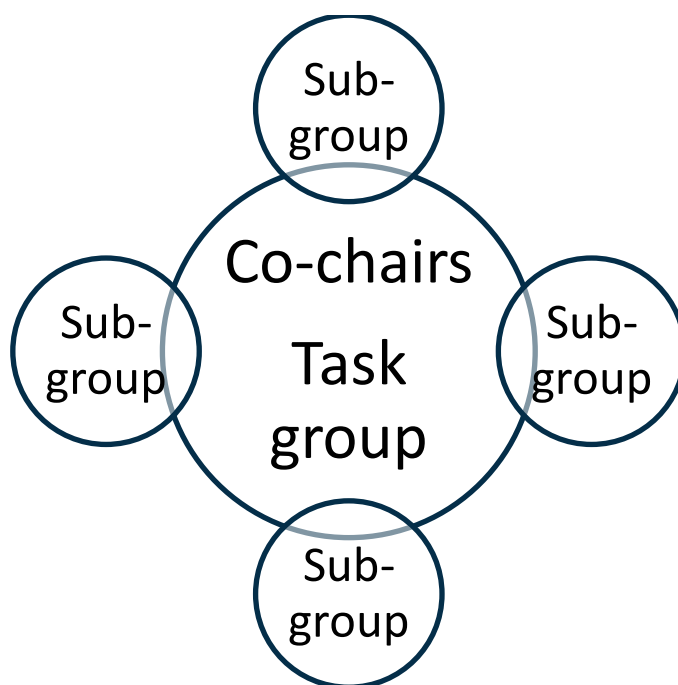


Figure 4.1: CMINE task group on spontaneous volunteers organisational chart

To support the workflow described below, where work will oscillate between the exploratory and consolidatory - thus ensuring a development process that is both democratic and well-grounded in current and actual challenges for volunteer management - the proposed organizational structure is horizontal.

The co-chairs drive and direct the work to optimize efforts and results while task group members distribute themselves into transitory sub-groups of 2-3 persons to tackle specific topics. Subgroups have the discretion to appoint a lead among themselves or to work as a collaborative as they see fit. Subgroups report back to the overall groups to review and reflect on results according to the plan described in section 6. As work on topics is concluded, new sub-groups are formed to tackle new topics.

Relevance of the Task Group challenge

Across Europe and in the rest of the world, volunteers play an important role in crisis management. Some volunteers are highly specialized and embedded in a strong organizational structure with planned shifts and clear roles. Other volunteers are deployed less frequently and may have a looser affiliation with the crisis management organization. Others again are “spontaneous” volunteers. They show up when a crisis occurs and offer their support on the spot.

Global policy and practice are developing to promote the well-being of staff and volunteers. For example, UN Resolution 70/129 (2015), “Integrating volunteering into peace and development: the plan of action for the next decade and beyond,” recognizes the role that volunteers are playing in the implementation of the 2030 Sustainable Development Agenda. As such, the resolution requests that Member States and the

United Nations system work together with volunteer-based organizations to enhance the protection, security and well-being of volunteers.

The nature of volunteering is changing; communities are engaging with social, humanitarian, and development causes in new ways. People do not necessarily subscribe to the idea of life-long voluntary service for the same organization but rather see themselves as agents of change in relation to concrete causes and social movement. Spontaneous volunteers can offer their services to established crisis management organizations or self-organize in ad hoc groupings with no or little organizational support.

Lines between service users and volunteers are blurring. Volunteers are often members of the affected community, and thus likely to be personally affected by the crisis to which they are responding. In social work with vulnerable groups, people who belong – or have belonged – to the vulnerable group are often recruited as volunteers. This is sensible because as peers they have a deep understanding of the needs and culture of the service users. But they may also themselves be more vulnerable.

This affects the ways in which volunteers can and should be cared for: support systems should be flexible and able to address the needs of more fluid groups of volunteers.

Crisis management volunteers are often in the first line of events. They work under physically and mentally difficult - sometimes dangerous - circumstances. Volunteers regularly experience high levels of stress at work, which may cause an increase in sickness levels, risk-taking behaviour or security incidents because of impaired judgment. Deploying crisis management organizations have both an organizational and a moral duty to care for their staff and volunteers, especially when they work in high-risk situations that have the potential to lead to distress.

Spontaneous volunteers can be both a great resource and a challenge in crisis management. They can provide much needed extra hands and skills. But the fact that they are not affiliated with an organization complicates matters such as assessing their skills, backgrounds, organizing them and providing appropriate support in return.

The International Federation of Red Cross and Red Crescent Societies (IFRC) represents the world's largest network of volunteers. In 2011 the IFRC Reference Centre for Psychosocial Support released a tool kit for Caring for Volunteers. The core of this guidance document has a strong focus on promoting awareness on the subject, building capacity in the field, high-level advocacy and research into supporting and promoting psychosocial well-being in volunteers. But as the nature of volunteering is changing, so should support systems. Crisis management organizations that are unable or unwilling to adapt to a future of volunteering where affiliations are fluctuating and loyalties follow causes rather than organizations will find it difficult to recruit and retain volunteers and risk not living up to their obligations of providing physically and emotionally safe working environments for all volunteers.

Roles and responsibilities of the Task Group

Please find below an overview of the specific topics selected and assigned to the sub-groups. The overview will be updated as work progresses in accordance with the principle of democratic and incremental selection of topic outlined in the section on Work process.

Digital volunteerism

A think-piece on the needs of digital volunteers based on the below considerations and including recommended ways forward, e.g. in the form of an outline of training needs for digital volunteers, e.g. on sorting and sourcing information (fake news), self-care.

Digital volunteers are volunteers who complete their activities in whole or in part via the internet, often working from home or school. Where volunteers classically work together physically in pairs or groups, digital volunteers are often physically disconnected from their peers and may also work on activities on their own.

The role of digital volunteer is becoming of increasing importance due to the large amount of data produced during disasters and the need of first respondents to make sense of and transform this data into actionable information. While physical safety is not usually a matter of concern for digital volunteers, this group presents specific challenges that need to be accounted for.

1. The regular exposure to images of people injured or dead can be a source of distress and digital volunteers must be protected against the harmful effects of this distress.
2. The activity of the digital volunteer is usually performed simultaneously to other daily tasks such as working, taking care of children, cooking or cleaning. This often places a huge burden on these volunteers in terms of workload.
3. Digital volunteers are in need of training about how to work in a team and how to verify information available on the web.
4. Digital volunteers do not need insurance but a code of conduct that defines responsibilities for the provision of false or misleading information should be designed.
5. Emergency organizations should define protocols for the inclusion of digital volunteers in their response activities

VOST Portugal, represented in CMINE by Maria Isabel de Silva, is currently involved in supporting the need for information about the cyclone Idai in Mozambique. This is a good example of digital volunteering, and therefore a case study, if possible, will complement the think piece.

Authors: Serena Tagliacozzo and Maria Isabel de Silva

Volunteering in crisis and dangerous situations

The goal is to work towards recommending minimum standards for spontaneous volunteers in dangerous situations at an international humanitarian policy level, including dangerous situations such as working in conflict and war zones, large-scale natural disasters, etc.

The IFRC and the IASC Reference Group for MHPSS in emergency settings are represented in CMINE. Both organisations have sub-committees working on this topic for affiliated volunteers and they will be linked.

Output: Three to five pages outlining:

- recommendations/framework for key actions for engaging with SV and topics for further investigation
- special challenges working with spontaneous volunteers in dangerous situations (as opposed to affiliated volunteers)?
- What should minimum standards contain? – outline of content
- Requirement for training of SV, their managers – especially in relation to self-care and support
- Psychosocial supervision and follow-up in the short-, middle-, and long-term

Authors: Adjmal Dullo and Andreas Loepsinger, Anna Schevchenko-King (to be confirmed)

Field-level needs of spontaneous volunteers

Some of the same considerations as above, but on a much more practical, operational level. Output: an outline of some of the practical problems arising in working with spontaneous volunteers from a crisis management perspective, and some recommendations for practical steps, further readings, etc.

Caring for the volunteers during the response as well as the aftermath is an important angle here, but also problems related to legal frameworks (which differ greatly from country to country), insurance, safety etc. are important.

Authors: Chaim Rafalowski, Massimo Lanfranco and Kim Lintrup (to be confirmed)

Definition/taxonomy and mapping

Output: Overview/mapping of existing resources about spontaneous volunteers with commentary – particularly focusing on the inclusion (or lack thereof) of care and support systems for SVs.

Additionally, the lack of common understanding of the term “spontaneous volunteers” both within the group and in the field in general will be addressed.

For example, definitions don’t seem to take into account whether a volunteer is part of the affected population or not.

This output will build on the DRIVER deliverables D36.1_Experimentation_Framework (Sections 2 and 3, pp. 18-51, in particular), **D934.19** and address the ISO standard 22319:2017.

Authors: Daniel Auferbauer, Nina Baron

Work process

The work process of task group is outlined in the figure below. Work will oscillate between the exploratory and consolidatory, thus ensuring a development process that is both democratic and well-grounded in current and actual challenges for volunteer management.

The CMINE will be used to support the work of the task group serving as a repository for minutes, resources and group outputs.

The detailed planning of the work, including meetings is given in the task group Gantt chart in the section of Task Group Meetings.

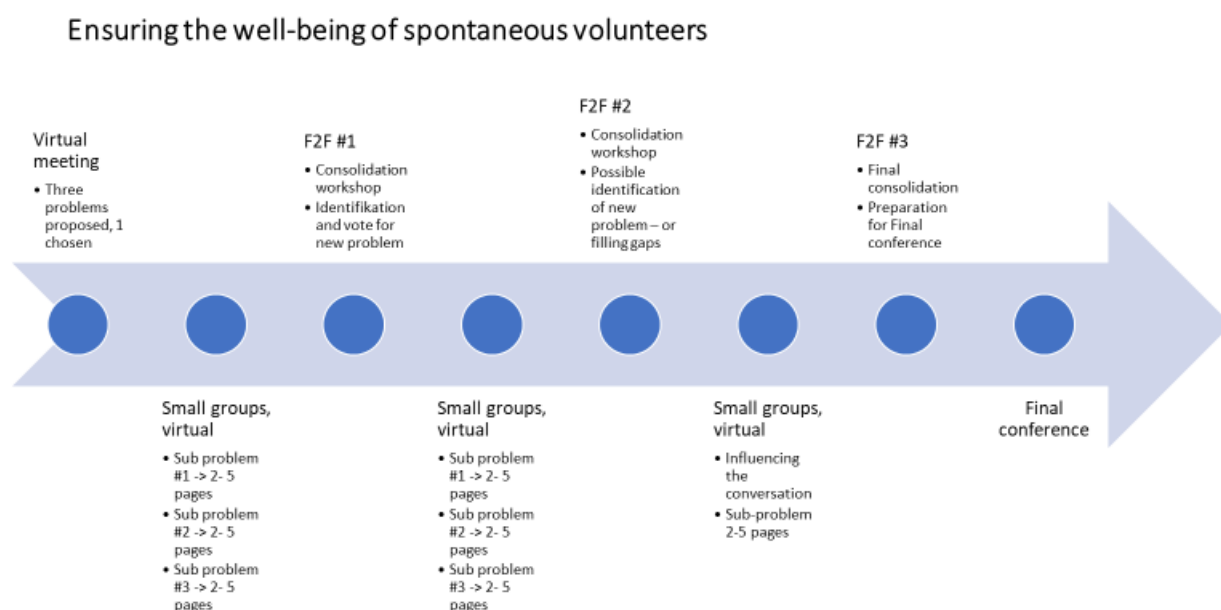


Figure 7.1: Work process for the task group on volunteer management.

Virtual Kick-off meeting and working period 1

To make optimal use of the capacities and experiences in the task group the work will kick off with virtual co-development sessions in February and March 2019 to describe three main problems and expected

outputs that the group will tackle. The co-development sessions will build on and develop further the goals and relevance sections contained in this document.

The kick-off session will also see the formation of small sub-groups, each tasked to tackle a subset of the three main problems. The subgroups will meet and work virtually to develop concise 2-5 pagers to capture their sub-problem in preparation for the first F2F meeting.

1st F2F meeting and working period 2

The first F2F meeting consists of a consolidation workshop and problem-development session, to be held on 14 June 2019, in conjunction with the I4CM event on volunteers in Copenhagen on 12 and 13 June 2019.

In the consolidation workshop, the task group will first present and discuss the concise, sub-problem papers. To ensure consistency and to cross-fertilize thoughts, the final adjustments and additions will be drafted in the workshop.

The second goal of the F2F is to revisit the original problems to expand and/or complement them with additional problems identified in the course of the sub-groups' work. As in the kick-off meeting, the task group will complete a discussion to identify a new set of sub-problems to tackle, and to form new sub-groups around these sub-problems. Selection will be based on consensus within the group. The task group may decide to develop wholly new sub-problems or to develop sub-problems that build and expand on the sub-problems already identified, or both.

The second working period is extended to allow synergies with the unfolding of the Trial Austria work, which culminates with the Trial in Styria on 9 to 14 September.

2nd F2F meeting and working period 3

The second F2F meeting follows the same structure as the first F2F and consists of a consolidation workshop and problem-development session. This meeting will take place on 19 September 2019 - in conjunction with CoU-14 event in Brussels. Please see the section above for detailed description of the processes involved.

The second F2F meeting will also encompass a third goal, namely to tackle how the task group engages with a wider set of stakeholders at policy, management and field level. This could entail sending any position papers that have come out of the working periods to review or to develop work already completed into articles for the general audience.

A balance between developing papers on further sub-problems and engaging with a wider public will have to be struck and will need to be carefully coordinated with SP95 work overall.

Finally, the second F2F meeting will also be dedicated to the preparation for the D+ Final conference and to defining the preparatory work needed to engage successfully in that arena.

Working period 3 will run up to the D+ final conference.

3rd F2F meeting and D+ Final conference

The 3rd and final F2F meeting is dedicated to final consolidation of the task group's work and to preparing for the D+ Final conference, where the group expects to present its key outputs.

Date: February 2020, immediately before the D+ Final conference.

Task Group Meetings

Key planning, deadlines and meeting dates are given in the Gantt chart below.

Table 8.1: Task Group Volunteer Management meetings

Year	Action	Date
2019	Virtual Kick off Meeting 1.0	28-feb
	Draft final road map incl task group input	19-mar
	Virtual Kick off Meeting 2.0 (same as VKoM 1.0 but with different participants)	22- mar
	Theme chairs meeting CoU-13, March BXL	27-mar
	Virtual 30 minutes sub-group calls + 30 minutes task group call for entire group	April
	Virtual 30 minutes sub-group calls	May
	Draft final 2-5 pagers sent to theme chair	27-maj
	Agenda for 1st F2F circulated to task group	03-jun
	Draft final 2-5 pagers compiled and circulated to task group	03-jun
	CMINE chairs meeting, Copenhagen	11-jun
	First F2F mtg @ I4CM conference on volunteer management, Copenhagen	14-jun
	Minutes of first F2F to task group and head chair	24-jun
	Virtual 30 minutes sub-group calls	July
	Input to D953.13 Enhancing the shared understanding of CM – progress report n°3 M63	Ultimo July
	Virtual 30 minutes sub-group calls + 30 minutes task group call for entire group	Aug
	Virtual 30 minutes sub-group calls	Sep
	Draft final 2-5 pagers sent to theme chair	
	Agenda for 1st F2F circulated to task group	
	Draft final 2-5 pagers compiled and circulated to task group	
	CMINE chairs meeting	? - Sep
	Second F2F @ Community of Users event in Brussels	19-sep

	Minutes of second F2F to task group and head chair	29-sep
	Virtual 30 minutes sub-group calls	Oct
	Virtual 30 minutes sub-group calls + 30 minutes task group call for entire group	Nov
	Virtual 30 minutes sub-group calls	Dec
2020	Virtual 30 minutes sub-group calls + 30 minutes task group call for entire group	Jan
	Draft final 2-5 pagers/other products sent to theme chair	early feb
	Draft final D+ final conference presentation sent to theme chair	early feb
	Agenda for 2nd F2F circulated to task group	early feb
	Draft final 2-5 pagers compiled and circulated to task group	early feb
	Draft final master presentation at D+ final conference developed and shared with task group	early feb
	Third F2F immediately preceding D+ Final conference	Feb 2020
	Participation and presentation at D+ final conference	Feb 2020
	Minutes of third F2F	Feb 2020
	contribution to D953.14 Enhancing the shared understanding of CM – Final report and way forward M70	Feb 2020
	CMINE annual report	TBD
	CMINE final task group report	TBD

Synergies with other themes

Volunteer management is a cross-cutting issue with relevance for all types and stages of disaster management. Most crisis management organizations rely on volunteers to some degree – and in most crisis situations people will support those affected; either by offering their services to established crisis management organisations or by self-organizing.

The task group on Volunteer Management is composed of people with a wide range of backgrounds in psychology and crisis management to ensure a strong link to crisis management in general and to flooding and wildfire in particular.

There are strong possible synergies with a wide range of external stakeholders.

One task group member is chairing a working group on volunteer management under the Inter-Agency Standing Committee (IASC) Reference Group on Mental Health and Psychosocial Support in Emergency Settings. Danish Red Cross is part of that group. The working group represents a number of large

international NGOs and UN agencies working humanitarian emergencies globally. It is expected that there will be synergies between the work in the two groups, which complement each other without overlapping.

The Red Cross Red Crescent Movement is the world's largest humanitarian organization, and at the same time it is the world's largest volunteer organization. In December 2019 the Movement will put a joint policy on mental health and psychosocial support to the Council of Delegates and a resolution to the States on "Mental Health and Psychosocial Needs of People Affected by Armed Conflicts, Natural Disasters and other Emergencies". Danish Red Cross is part of the project group drafting the policy and resolution and has a strong focus on the inclusion of considerations of volunteers in armed conflicts, natural disasters and other emergencies.

Several of the task group members are affiliated to agencies and NGOs working with volunteers and the topics they are bringing to the task group has great relevance to the work they are doing with volunteers on a daily basis. It is therefore foreseen that some of the results of the task group will be applicable in real-life work, while others will point towards larger challenges that require more resources to address.

Annex 7 – CMINE Steering Committee Strategy and Workplan Document

Introduction

The CMINE Steering Committee consists of the CMINE Head Chair, a group of relevant DRIVER+ consortium members as well as carefully selected external partners with specific subject expertise relevant to support the strategic development of the CMINE.

The overall objective of the Steering Group is to provide guidance on questions and issue areas, which will have a fundamental impact on the *coming-to-age phase* of the young initiative. While the CMINE Support Office's work is essential to activate, support the CMINE community, it is the role of the Steering Committee to zoom out of the day-to-day activities and closely monitor and navigate the dynamic community-building process moving forward. To this end, the Steering Committee will focus on the following issue areas:

Table 4.1: CMINE Steering Committee issue areas

Issue area 1 - Community development	
Community Management	ARTTIC
Dissemination and External engagement	PSCE
Issue area 2 - Validation and quality control	
Validation and Quality Control	CSDM
Issue area 3 – Sustainability	
Sustainability	Risk Society
Long-term governance	Ecorys
CMINE funding models	Ecorys
Issue area 4 – CMINE internal support activities	
CMINE Task Group Coordination/Support Office	Ecorys
CMINE Steering Committee Coordination	Ecorys

While the Steering Committee needs to stay flexible and react to ad-hoc developments, its work will mainly consist of the following activities:

- Provide guidance on questions and issue areas, which will have a fundamental impact on the young initiative (i.e. sustainability, outreach, branding, etc.).
- Develop a strategy and work plan for your respective issue area.
- Closely monitor and navigate the dynamic community-building process moving forward.
- Discuss and address ad-hoc CMINE-related issues.
- Consensus driven decision-making body of the CMINE. If consensus driven decisions are not possible, a simple majority voting can be used as a last resort.¹²

¹² Meaning that a decision can be made when 51% or more of the Steering Committee members agree.

The work of Steering Committee is based on the above-mentioned overall activities of the Steering Committee and the concrete KPIs which have been identified by the CMINE team/Chairs and approved by the DRIVER+ PO. Each Steering Committee member is responsible for his/her respective KPIs and has developed a strategy and concrete work plan on how to achieve the KPIs and objectives. The draft of the strategy for each issue area has been presented during the first physical Steering Committee Meeting on Wednesday, 27 March 2019 and was reviewed in the course of June 2019. The final strategy and work plans will be integrated into the CMINE Strategy Document (different to CMINE Guidance document) which will document the work of the Steering Committee throughout the year.

The Steering Committee Strategy and Work Plan will present the different strategies that each issue area lead has developed. These Work Plans should contain the following elements:

- Relevance of the issue area.
- Roles and responsibilities.
- Draft concept/proposed solutions and actions.
- Work processes.
- KPIs and overall objectives of the issue area.
 - Short-term (October 2019)
 - Long-term draft (April 2020)

Steering Committee Composition

The composition of the Steering Committee is as presented below. This overview also shows which party is in the lead with regards to which Issue Area. The different colours show which Issue Areas can be grouped (and will be addressed jointly).

The roles and responsibilities of the key staff per partner can be broken down as follows:

Table 4.2: Roles and responsibilities per partner in CMINE Steering Committee

TNO	
Key personnel and roles	<ul style="list-style-type: none"> • Marcel van Berlo (Head of Steering Committee) • Marijn Rijken (Deputy Head of Steering Committee)
Overall roles and responsibilities	TNO will be the Chair of the CMINE Steering Committee which will monitor and evaluate the progress of the CMINE and the different themes and working groups. Being a bit more distant from the day-to-day activities, the Steering Committee will review the overall developments and provide strategic advice.
ARTTIC	
Key personnel and roles	<ul style="list-style-type: none"> • Andreas Seipelt (CMINE Focal Point and Member of CMINE SC) • Myriam Ben Ammar (Community Manager) • Laure Dodin (Community Manager) • Rob Munro (Dissemination and Communication)
Overall roles and responsibilities	<ul style="list-style-type: none"> • Setup and configuration of the CMINE Online Community Platform (COCP) and backoffice support • User administration and admission • Content-oriented support to theme chairs and project partners to identify relevant content for the population of the COCP • Support the outreach to project partners and external stakeholders for the identification and population of the COCP with relevant content • Facilitation and moderation of discussions on the COCP

	<ul style="list-style-type: none"> Focal point for the solution provider Hivebrite for technical issues and trouble shooting Provide overview of platform analytics
Ecorys	
Key personnel and roles	<ul style="list-style-type: none"> Alexandra Schmid (Steering Committee Coordinator and Member) Gabrielle op t Hoog (CMINE Support Office Coordinator and Steering Committee Member)
Overall roles and responsibilities	<ul style="list-style-type: none"> Development of CMINE Guidance Document and Steering Committee Workpan Documents Managing and coordinating CMINE Steering Committee Meetings Managing and coordinating Chairs Meeting Coordinating Roadmap development Reporting activities CMINE Steering Committee and Chairs Meeting Coordinating inputs for CMINE Annual Report Supporting CMINE Head Chair and Task Chairs in day-to-day management Be the go-to-point for all non-technical CMINE questions Developing Sustainability Strategy and Business Canvasses for CMINE (CMINE-CoU adoption/CoE adoption) Contact point for CoU-related questions
PSCE	
Key personnel and roles	<ul style="list-style-type: none"> Marie-Christine Bonnamour Jean De Preter Marta Pacheco
Overall roles and responsibilities	<ul style="list-style-type: none"> Lead internal and external engagement and dissemination activities Manage social media Prepare articles on CMINE Contribute to the content (for example a cross thematic theme on standardisation) Co-develop standardisation group with DIN
Risk Society	
Key personnel and roles	<ul style="list-style-type: none"> Magda Stepanyan
Overall roles and responsibilities	<ul style="list-style-type: none"> Member of DRIVER+ Sustainability Board Member of CMINE Steering Committee Link between Sustainability Board and CMINE Steering Committee sustainability activities Providing advise and CMINE sustainability-related questions
CSDM	
Key personnel and roles	<ul style="list-style-type: none"> Todor Tagarev (CMINE Head Chair) Nina Dobrinkova (Wildfire Theme Chair)
Overall roles and responsibilities	CSDM will be acting as the CMINE Head Chair and the Chair of the CMINE Theme Forest Fires The Head Chair serves as the main driver of the CMINE and is

	<p>responsible for the overall coordination and direction of the initiative. The Head Chair oversees what is happening within the various themes and should foster synergies and encourage collaboration across themes.</p> <p>The Theme Chairs are the thought leaders of a dedicated theme and, simultaneously, function as the head of the working group developed within the respective theme. The exchanges between the chairs and the working group members take place both in-person and virtual.</p>
HKV	
Key personnel and roles	<ul style="list-style-type: none"> Hanneke Vreugdenhil (CMINE TG Chair Flood)
Overall roles and responsibilities	<p>HKV will be Chair of the CMINE Theme Flooding. The Theme Chairs are the thought leaders of a dedicated theme and, simultaneously, function as the head of the working group developed within the respective theme. The exchanges between the chairs and the working group members take place both in-person and virtual.</p>
EOS	
Key personnel and roles	<ul style="list-style-type: none"> Elodie Reuge
Overall roles and responsibilities	<p>EOS will support implementation efforts to build a CoPCM, specifically focusing on the industry network. EOS will be responsible for the liaison with EC DGs. The specific liaison activity for the period M41-M72 will be to promote the DRIVER+ messages and research, development and demonstration priorities (identified in the D&C) to the relevant DGs within the European Commission – DG HOME, DG ECHO and the Security Union as well as DGs dealing with topics related to a crisis.</p>
DRC	
Key personnel and roles	<ul style="list-style-type: none"> Martha Bird (CMINE TG Chair Volunteer Management)
Overall roles and responsibilities	<p>DRC will contribute to the development of a CoPCM by engaging its global networks. DRC will make its communication platforms for communicating with its global stakeholders available and support by providing advice on communicating messages with volunteer-based organisations (with focus on the Red Cross). DRC will also be Chair of the CMINE Theme Volunteer Management. The Theme Chairs are the thought leaders of a dedicated theme and, simultaneously, function as the head of the working group developed within the respective theme. The exchanges between the chairs and the working group members take place both in-person and virtual.</p>
DIN	
Key personnel and roles	<ul style="list-style-type: none"> Esther Kähler (Member of TG “Light” Standardisation)
Overall roles and responsibilities	<p>DIN & PSCE will be responsible for the liaison with standardisation experts and working groups relevant to a CoPCM. The specific liaison activity for DIN for the period M41-M72 will be to re-setup and to deepen the liaison with CEN/TC 391 and other relevant standardisation committees. The specific liaison activity for PSCE for the period will be to establish links with the 3GPP initiative to discuss any critical communications standardisation potential arising from the project.</p>

VALABRE	
Key personnel and roles	<ul style="list-style-type: none"> Alice Clemencau
Overall roles and responsibilities	VALABRE will be responsible for the liaison with practitioners to become part of the CoPCM. The specific liaison activity for the period M41-M72 will be to inform them about the project's objectives, expected outcomes and its progress and to make them aware of the benefits a CoPCM offers.
DWR	
Key personnel and roles	<ul style="list-style-type: none"> TBC.
Overall roles and responsibilities	DWR will be responsible for the liaison with the actors beyond the EU-level (Local Government departments, the UN, the World Bank, International NGOs and Voluntary sector organisations). The specific liaison activity for the period M41-M72 will be to inform them about the project objectives, expected outcomes and its progress and to make them aware of the benefits a CoPCM offers.
All DRIVER+ partners	
Overall roles and responsibilities	All DRIVER+ partners: will actively contribute to the DCP with content and invite their contacts to join the community. All DRIVER+ partners will provide support to recruit participants and participate actively to the exchanges taking place in the DCP, related to their domain of interest.

The unique value proposition of CMINE

A key prerequisite for its successful implementation is the extent to which the CMINE manages to attract external networks and stakeholders and to which degree they can see the CMINE as an important initiative that can support them in their day-to-day work. What is the *raison d'être* of the CMINE and, related to this, which problem is the CMINE trying to solve?

Closely related to issues such as possible future funding and governance models for the CMINE, is an examination of the unique value proposition of the CMINE compared to the already existing networks in the crisis management domain. The more added value the CMINE brings to the table, the easier it will be to ensure its continuation.

The following section paragraphs provides an overview of the unique value proposition of the CMINE which formed the basis for the elaboration of the new promotional material developed.

What is it?

CMINE - A Community of Practice to foster innovation in Crisis Management and Disaster Risk Reduction

The Crisis Management Innovation Network Europe (CMINE) is a Community of Practice that fosters innovation and enhances a shared understanding in the fields of Crisis Management and Disaster Risk Reduction in Europe. CMINE is creating an umbrella network of stakeholders active in Crisis Management by linking existing projects, networks and initiatives. By doing so, CMINE reduces fragmentation, generates ideas and helps to identify innovative solutions to improve European resilience.

CMINE comprises an online community platform and face to face meetings and workshops with the aim of tackling current and future challenges and facilitating the uptake of research and innovation by practitioner organisations. Different Task Groups have been set up to develop approaches aimed at resolving current issues in different Crisis Management domains, such as Floods, Wildfires or Volunteer Management.

CMINE is designed to evolve continuously through collaboration with the aim of becoming a pan-European platform, which is centred on the exchanges between various Crisis Management professionals.

Who is it for?

CMINE aims to bring together a diverse group of stakeholders that would not normally interact with each other on a regular basis. This includes policymakers, practitioners, members of the private sector, NGOs/CSOs, science & research, training & education, media and standardisation representatives.

What is the added value?

CMINE offers its members an online and offline environment to actively engage with other Crisis Management professionals. Its guiding principles and ambitions are to:

- **Foster multi-stakeholder and cross-sectoral interaction** – Join a diverse group of stakeholders active in Crisis Management, share knowledge, ideas and work together to solve current and future challenges.
- **Engage members through a content-driven approach** – Benefit from a structured, moderated and open space to generate ideas and foster innovation through interaction.
- **Become a hub for Crisis Management Innovation in Europe** – Discover key information such as results of research projects and cutting-edge Crisis Management solutions and stay up to date on Crisis Management news and events.
- **Provide visibility and networking opportunities to the Crisis Management community** – Showcase your results (e.g. EU-funded research projects) to increase visibility, while expanding your networks through our expert database.

State of play (July 2019)

- During the first f2f SC Meeting in Brussels on 27 March the current cost structure of the CMINE was discussed. It has been agreed that it will be impossible to sustain the CMINE without any external funding. Funding is required for the Task Group Meetings, the work of the Chairs and the Head Chairs, travelling as well as the hosting platform and the technical help desk.
- ARTTIC and Ecorys developed and presented several CMINE funding models. It has been agreed that the most feasible sustainability scenario is to embed the CMINE into the proposed CoU governance framework. However, the other scenarios will not be discarded since it is important to have a 'Plan B'.
- It has been agreed that when developing sustainable CMINE models one should not focus too much on financial aspects since the CMINE could receive budget from various entities and not just from the Commission. Instead, the purpose of the CMINE sustainability scenario development should focus on developing a fit-for-purpose scenario.
- Decisions on CMINE integration cannot be taken without the voice of DG HOME; CoU Security governance plans are in early phase and might only kick-off when DRIVER+ project is about to end; alternative sustainability models need to be prepared in parallel without knowing if the preferred option (CMINE-CoU integration) will work.
- A cross-thematic working group will be created on Standardisation with inputs of DIN and the support of PSCE/Ecorys.
- CSDM will develop a concept for a 'best solution competition' (cross-thematic working group). The winner will be announced during the final DRIVER+ conference.

Table 4.3: CMINE Meetings conducted

Date	Type	Place
20 December 2018	CMINE Steering Committee Kick-Off f2f Meeting	The Hague, The Netherlands
18 February 2019	CMINE Steering Committee Meeting	Virtual
27 March 2019	CMINE Steering Committee f2f Meeting	Brussels, Belgium
23 April 2019	CMINE Steering Committee Meeting	Virtual
30 April 2019	DRIVER+ SP95 f2f Meeting	Berlin, Germany
12 June 2019	CMINE Steering Committee f2f Meeting	Copenhagen, Denmark
16 July 2019	CMINE Steering Committee Meeting	Virtual
18 September 2019	CMINE Steering Committee f2f Meeting	Brussels, Belgium

Community development

Scope and objectives

Some of the most successful networks can perhaps be best viewed as clubs – with clear and tangible benefits to people that are part of, and are participating in, the club. This is not to say that there are strict rules for entry, other than working in the sector. After all, why would a person not involved in Crisis Management wish to join a CM network?

Belonging to, or membership of, the Club should be seen as aspirational and desirable – there should be benefits that members receive, or have access to, that non-members do not. These benefits could be invitations to events, access to information, research, expertise, the opportunities to meet and network with like-minded professionals, to share best practice and to influence debates and future policy.

This approach will undoubtedly help us both to attract new members and to retain existing ones within the CMINE community. Relevant, current and regularly updated content is of course essential to the future success of CMINE.

The overall objectives of the Issue area 1 - Community development are to:

- Ensure the availability of a wide range of information to members of the community as the starting point for the engagement (content-driven approach).
- Facilitate the interaction of members of the community.
- Identify and engage relevant/interested stakeholders (individuals & networks) in order to encourage them to join, contribute content and add value to the CMINE to make it an invaluable resource (thought leadership).
- Define and execute targeted dissemination activities to proactively communicate and raise awareness about CMINE to ensure maximum visibility and impact.

In order to achieve these objectives, the issue area is structured into two main focus areas:

1. Community Management
2. Dissemination and External engagement

Based on the decision for the transition from the previous online community platform CMT to the commercial alternative Hivebrite, CMINE will be able to exploit a powerful state-of-the art community software that will allow for the implementation of several ideas that have been developed in the previous periods of the project. Further details on the capabilities of the platform and the proposed structure will be provided in the following sections.

Focus area 1: Community Management

The main objective of the CMINE is to link and connect stakeholders dealing with Crisis Management allowing them to exchange on challenges at all levels of the crisis management cycle (preparedness, response, recovery, resilience). In order to do so in a structured manner an overall conceptual approach has been defined that directly builds upon the different capabilities of the Hivebrite solution. While Figure 1 depicts the global conceptual view (e.g. structure, inputs, outputs) Figure 2 elaborates upon the current state-of-play of ideas for the central element of the online community platform, the groups.

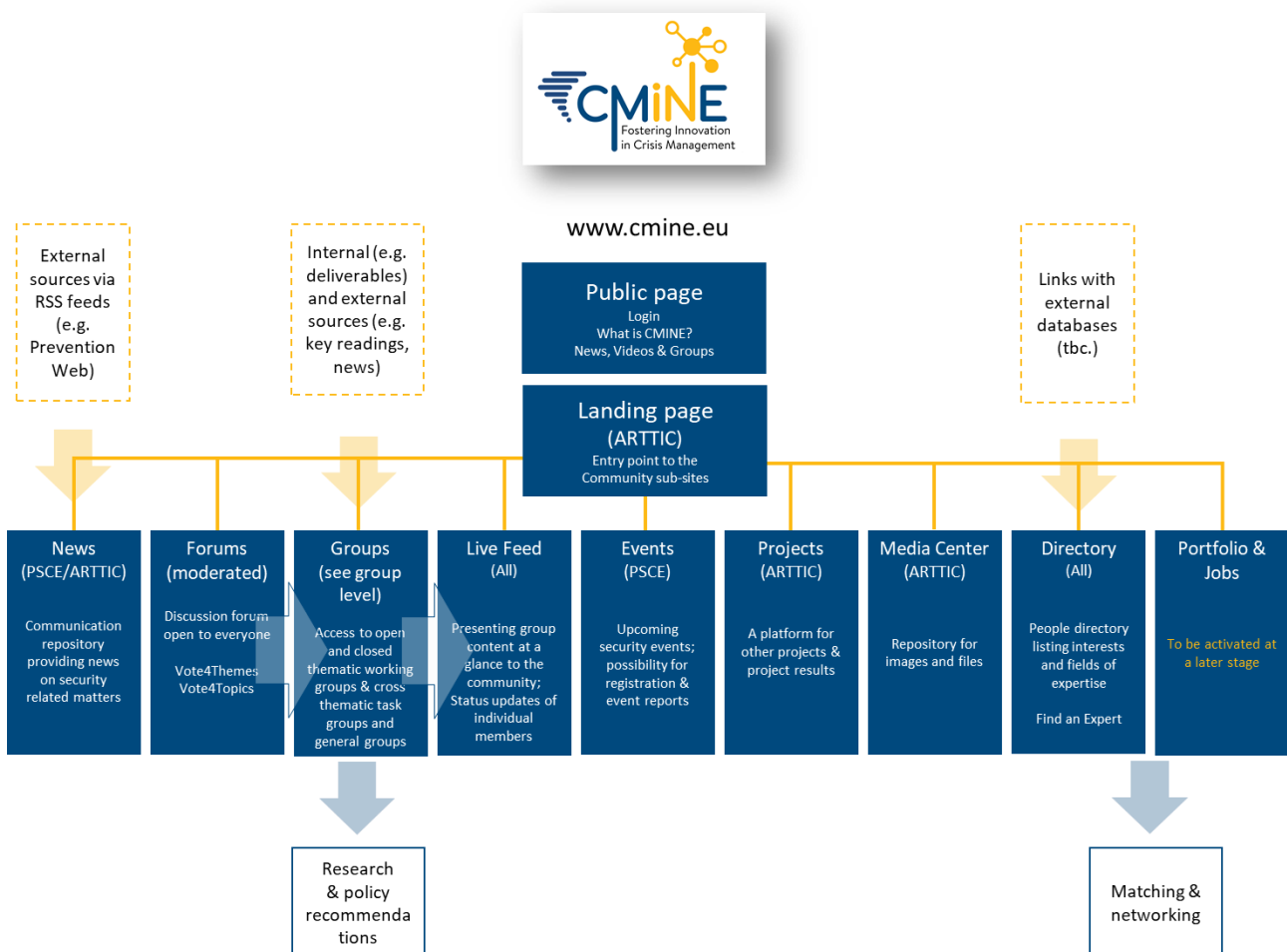


Figure 5.1.: COCP Conceptual overview

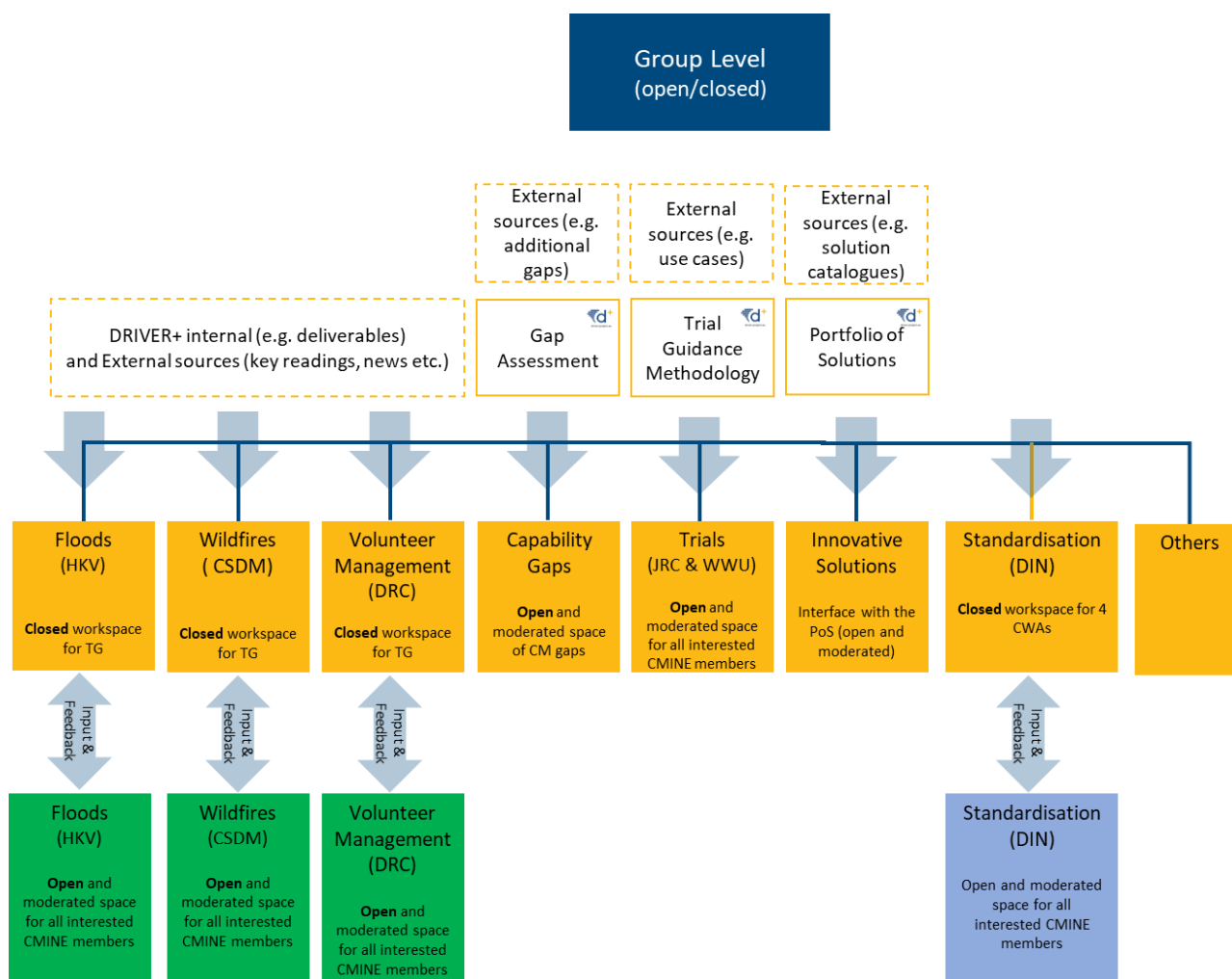


Figure 5.2.: COCP Structure on group level (incl. inputs/outputs)

In order to facilitate and structure this dynamic and complex process a dedicated community management approach will put into place. Community management can be understood as the process of altering an existing community to make a community stronger. This usually means attracting new people to a community, reaching out to new participants, or giving more opportunities for current community participants to engage with one another. The active management of a community leads to a larger and more engaged audience.

While several DRIVER+ partners, in particular the members of the CMINE Steering Committee, play an important role in developing the CoPCM two dedicated Community Managers (Laure Dodin and Myriam Ben Ammar from ARTTIC) were assigned to structure and guide the process. Their role reflects the inherent logic and workflows that guided the conceptualisation of the COCP. Specifically, they are tasked to:

- Set up and configure the COCP.
- Provide back-office support (e.g. user administration and admission).
- Provide content-oriented support to theme chairs and project partners to identify relevant content for the population of the platform.
- Support the outreach to project partners and external stakeholders for the identification and population of the platform with relevant content.
- Facilitation and moderation of community interaction and discussions on the COCP, in particular beyond the scope of the established tasks groups.

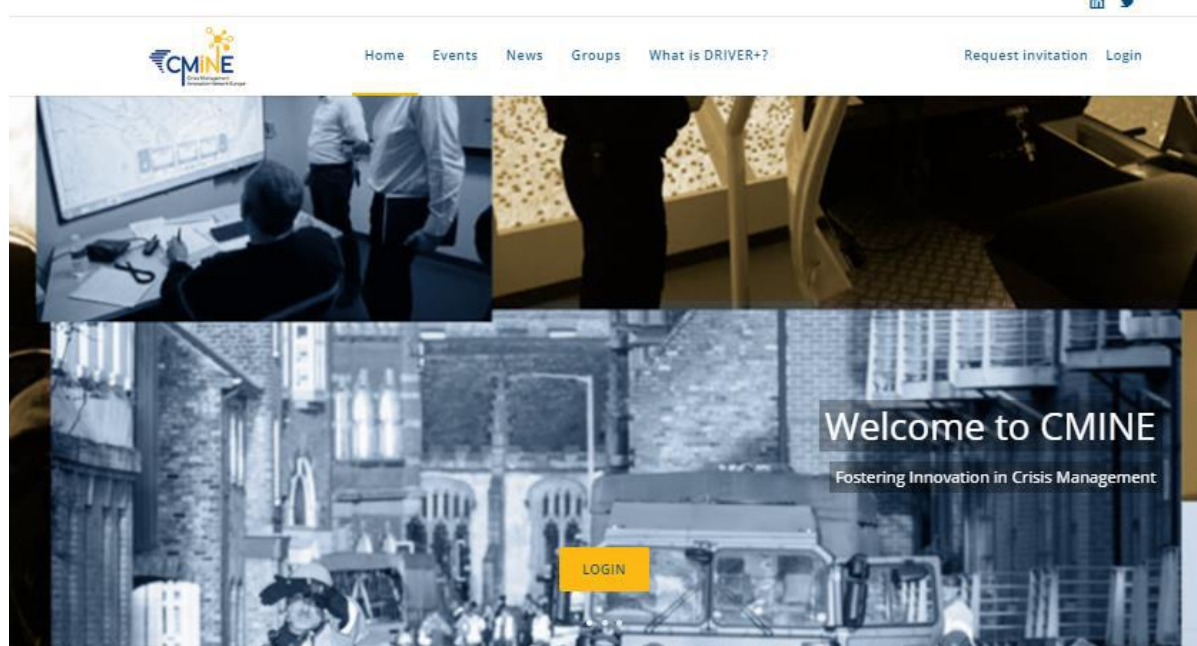
The groups page will provide access to the open thematic working groups, currently the Wildfires, Floods and Volunteer Management groups. In addition, it is foreseen to set up closed/non-visible thematic task groups only accessible to members of the respective groups. In addition, cross thematic task groups will be

set-up. At present the following groups are foreseen: Standardisation, Solution Competition and potentially Disaster Risk Reduction. A final decision is yet to be taken. Beyond the thematic task groups, general groups will be set up to inform members about key DRIVER+ outcomes such as the trials (the methodology used, their evaluation, results and added-value), the Test-Bed (the technical infrastructure, training modules and so forth), and the Centre of Expertise (its rationale, development & map) and the Policy Research Dialogue Roundtables (PRDR) (their rationale and outputs). In addition, a CMINE Steering Committee page will be set-up. Access to this group will be private, allowing members of the group to engage in discussions, share relevant internal documents and key outcomes of steering committee meetings. The Portfolio of Solutions group will be an open group and will be the main interface with the PoS. It will allow members to find and search solutions from the PoS. Potentially it will also be the place for the integration of external catalogues.

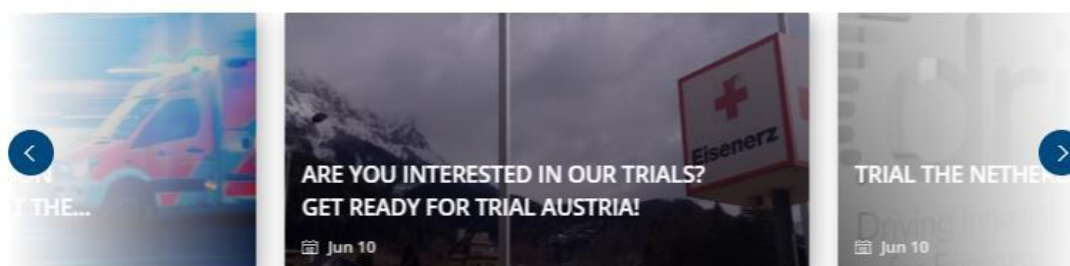
The media center will be a repository for images and files that can be linked to the other pages.

Setup and configuration of the COCP

Stakeholders and networks interested in joining the CMINE log in via the public page www.cmine.eu. This will be the first entry point to the community and will function as a teaser to encourage people to join the community. The page will introduce the CMINE presenting its unique value proposition. Moreover, it will display some selected news, a video of the CMINE Head Chair and present the public groups.



News



SEE MORE

Registration

Stakeholders interested in joining the CMINE can join CMINE via www.cmine.eu. The registration process is straightforward enough even if it was deemed necessary to add a validation step to avoid any risk of spamming. After having requested to join the CMINE, providing his/her full name and email address, the future user receives an invitation from the Community Manager and his/her profile is being created on the platform as soon as he/she accepts this invitation.

- In addition to standard questions regarding names, country of origin, organisation and position title, invited users need to answer some complementary questions on the clusters to which they belong and their fields of interest as delineated by the CMINE development team. These complementary questions are meant to inform user profiles as usefully as possible, allowing the rest of the CMINE community to get an immediate sense of who the newcomer is and where his/her expertise lies.
- The clusters have been purposefully limited in number and defined to reflect only key stakeholders in crisis management. They cover:
 - Policy maker (e.g. international, national, sub-national entities).
 - Practitioner (e.g. Fire and rescue services, police, medical).
 - Private Sector (e.g. Industry, SME).
 - NGOs and CSOs (e.g. IFRC, network organisations).
 - Science and Research.
 - Training and Education.
 - Media.
 - Standardisation.

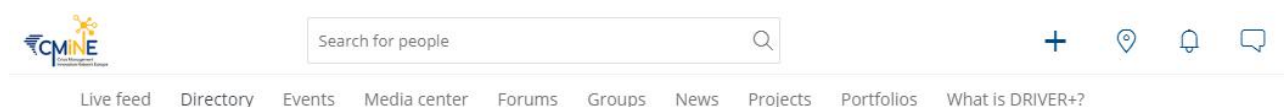
The fields of interest are more numerous and aim to give a relatively precise idea of the type of expertise and experience users have. They've been broken down into four reference categories and framed as to be both concise and comprehensive as detailed here below.

Fields of interest	Sub-fields
Policy themes	<ul style="list-style-type: none"> • Disaster Resilience and crisis management. • Border and customs, includes migration issues. • Crime (organised crime; cross-border crime, trafficking of people, arms, drugs, WMD and dual use materials; forensics (excluding cyberforensics). • Terrorism. • Critical infrastructure protection. • Cybersecurity (incl. digital privacy and data protection; cybercrime; cyberforensics). • Health threats. • Food safety. • External security.
Risk types	<ul style="list-style-type: none"> • Natural disasters (e.g. hurricanes, tsunamis, earthquakes, floods, forest fires). • Technology, infrastructure, & systems failures (e.g. major industrial accidents, bridge collapses, power or cyber system blackouts, airline and train crashes). • Infectious Disease (e.g. Ebola, MERS, H1N1, SARS, West Nile virus, avian flu). • Purposeful, human-initiated disasters (e.g. terrorism, bio-terrorism, riots, cybercrime).

Fields of interest	Sub-fields
Technology areas	<ul style="list-style-type: none"> • Sensors and navigation systems and networks. • Communications. • Computer-based systems. • Specialised software applications. • Transportation vehicles and equipment. • Remotely controlled systems and autonomous vehicles and systems. • Fire extinguishers and decontamination devices and substances. • Specialised disaster management equipment. • Training and personnel services.
Horizontal issues	<ul style="list-style-type: none"> • Foresight. • Risk Assessment. • Policy making. • Interoperability. • Resilience. • Standardisation. • Certification. • Trials. • Technology roadmaps. • Civil-Military Coordination. • Communication & PR. • Volunteer management. • Civil Society and Community engagement.

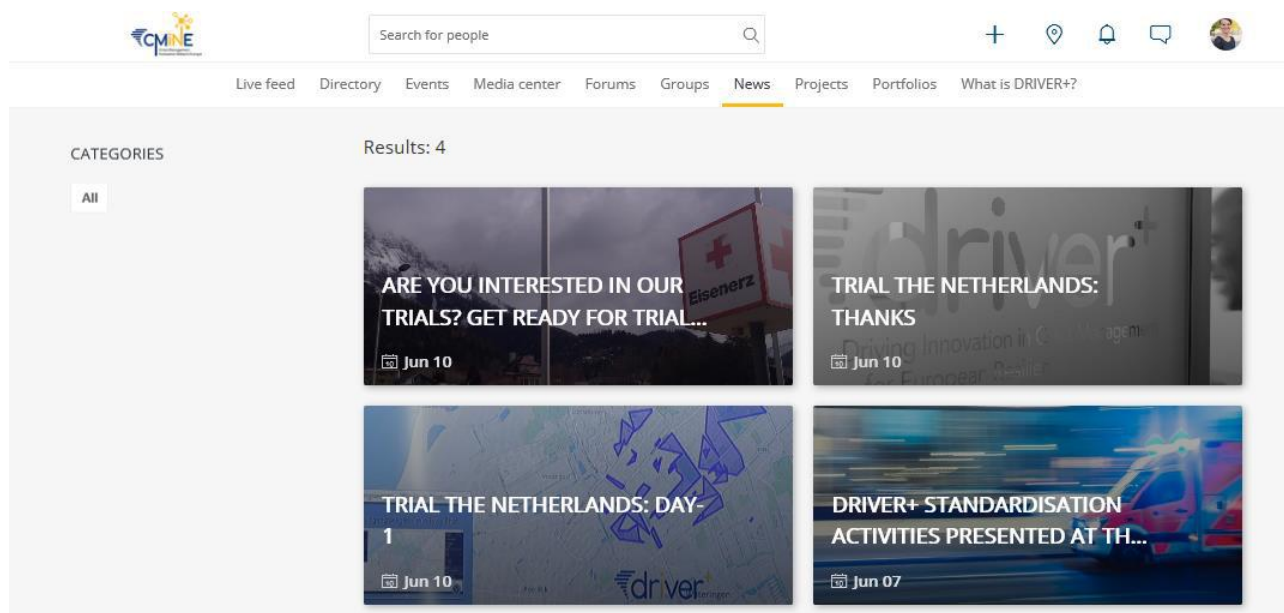
Landing page of the Community

After registration and logging into the Community site on top of the page, a user search function as well as menu is displayed that facilitates direct access to all sub-sections of the community.



News

The news section will act as a Communication repository. It is a place where members gain access to press releases, interviews, news on H2020 security matters from relevant sources such as Preventionweb, DRMKC, CoU and other related sources. It is planned to automatically update the news, where possible, via RSS feeds.

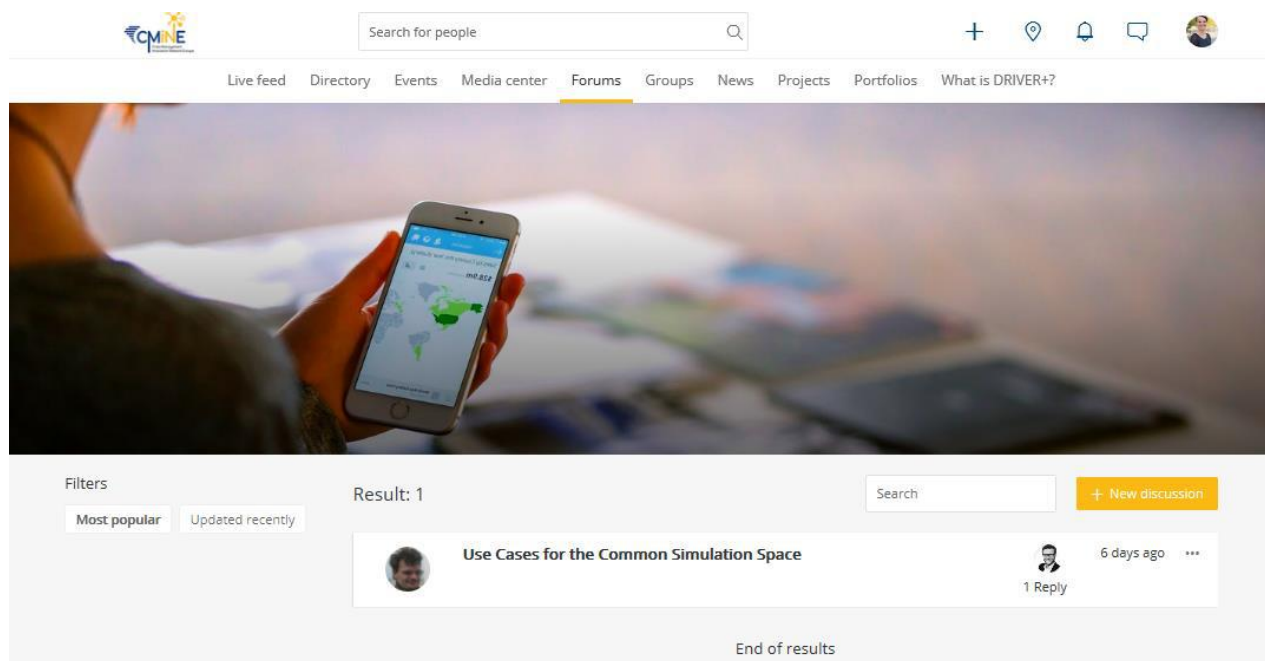


The news section will also be the space where members can read about the Expert of the week/month (presenting an expert having made a particular achievement, developed a new solution, carried out a trial....) and learn more about new innovative solutions.

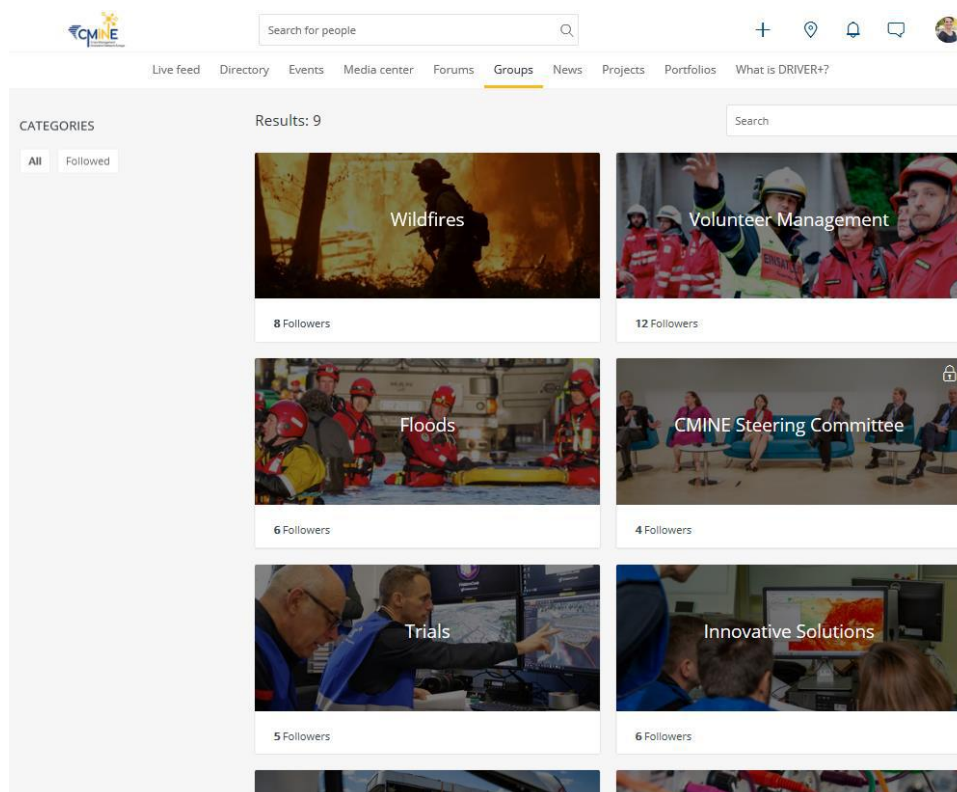
Forums

The forums will be open to everyone and will be a space where members can make suggestions, propose new challenges and topics to be addressed within the community. It will also be the ideal place to set up the Vote4Challenges polls.

The section features a search function to find discussion threads by keywords.

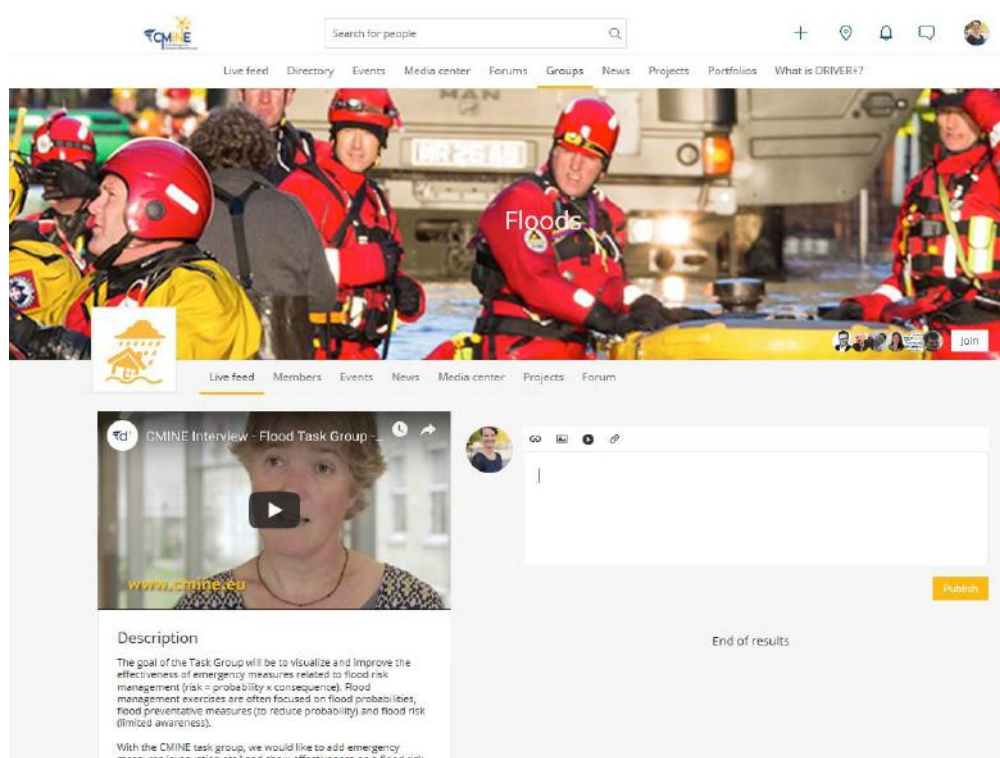


Groups

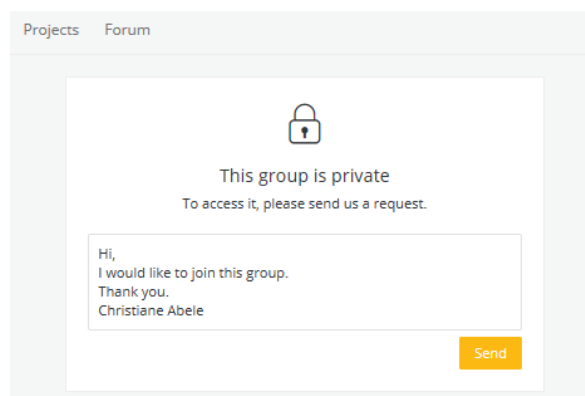
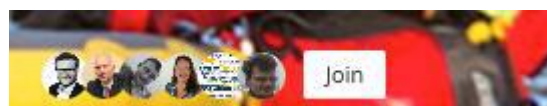


The groups page provides access to the open thematic working groups, currently the Wildfires, Floods and Volunteer Management groups.

In addition, it is foreseen to set up closed/non-visible thematic task groups only accessible to members of the respective groups. In addition, cross thematic task groups will be set up. At present a group on Standardisation will be implemented while additional ideas cover e.g. Solution Competition and Disaster Risk Reduction. The additional cross-thematic task groups will be elaborated and implemented in the next periods. Each group has its own Events section, Newsfeed, Media center, Projects page and Forum, so that the functionalities on the global level can be fully customized according to the needs of the respective groups.



For public groups, members can simply join a group via the "Join" button.



For private groups, members need to send a request to join the group. This request will be moderated by the Community managers.

Beyond the thematic task groups, cross-cutting groups will be set up to inform members about key DRIVER+ outcomes such as the trials (the methodology used, their evaluation, results and added-value), the Test-Bed (the technical infrastructure, training modules and so forth), and the Centre of Expertise (its rationale, development & map) and the Policy Research Dialogue Roundtables

(PRDR) (their rationale and outputs). In addition, a CMINE Steering Committee page will be set up. Access to this group will be private, allowing members of the group to engage in discussions, share relevant internal documents and key outcomes of steering committee meetings (see also above Figure 2).

The Portfolio of Solutions group will be an open group and will be the main interface with the PoS. It will allow members to find and search solutions from the PoS. Potentially it will also be the place for the integration of external catalogues.

Live Feed

The live feed presents selected group content and members status updates. It is currently the landing page for each member after the login.

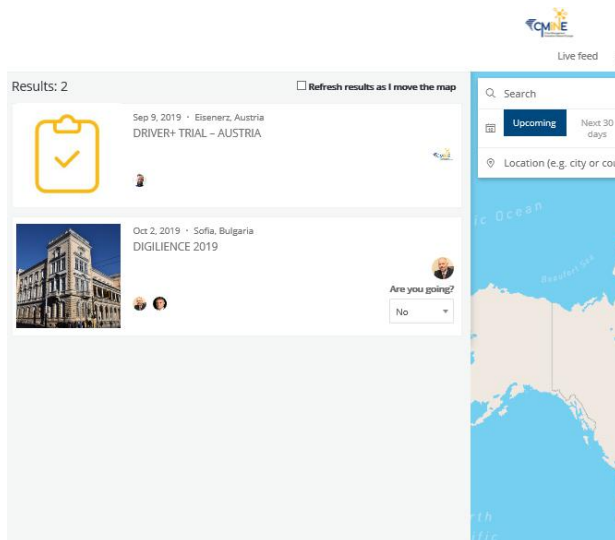
DRIVER+ project ■ D953.13 - Enhancing the shared understanding of CM – progress report n°3 ■ July 2019 (M63)

Member status updates distinguishes between normal posts (messages), trips (members informing about their travels), upcoming events and check-In (members informing that they are nearby and available for meetings). Via the comment function, members can comment on a post or like it.

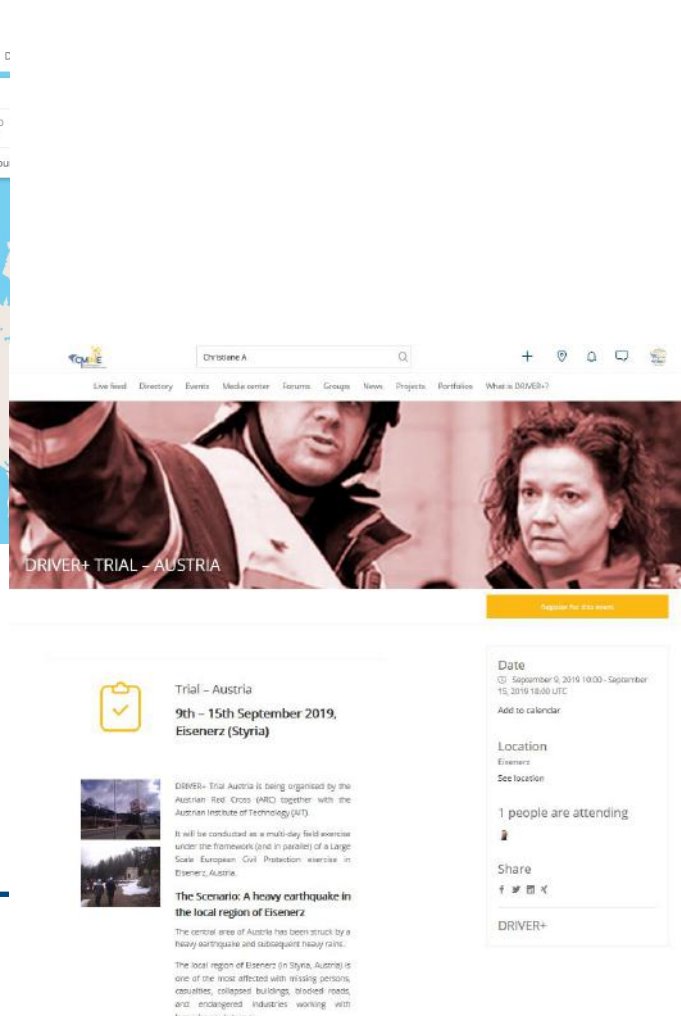


Events

On this page, upcoming security events of interest as well as DRIVER+ related events are presented.



The section also provides the opportunity to invite members to events. For DRIVER+ internal events, an event page will be created including the option to register. In addition, it will be used as an archive of past events with reports and pictures.



Projects

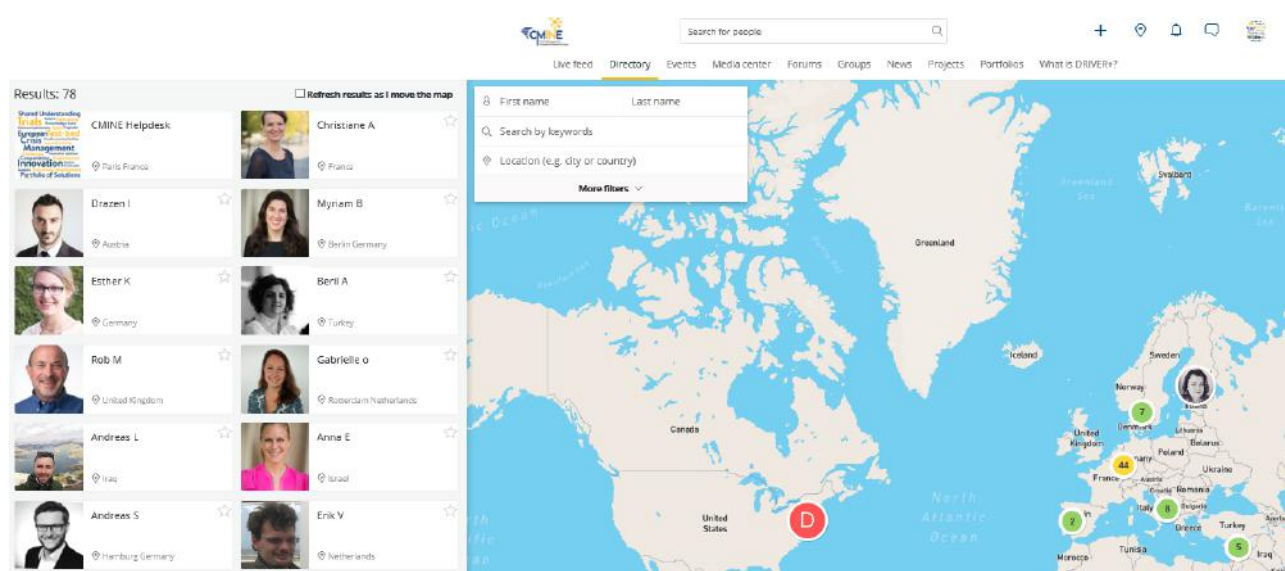
The projects page provides an opportunity to present affiliated or external networks & initiatives and showcase and disseminate their project results. The projects presented can be filtered by keyword, sector of activity and country.

Media Center

The media center functions as the central repository and data storage for all different types of files that users would like to share. This can either be images or documents that can be linked to the other pages. A search function allows to browse for file names or file types.

Directory

The directory will be the space for members to find other members sharing the same interests or expertise and reach out to them.



An extensive search function allows to search for members by name, keywords, location, skills, organization types, and others. Members can contact other members through the CMINE messaging service but will not be able to access their contact data (e.g. e-mail address).

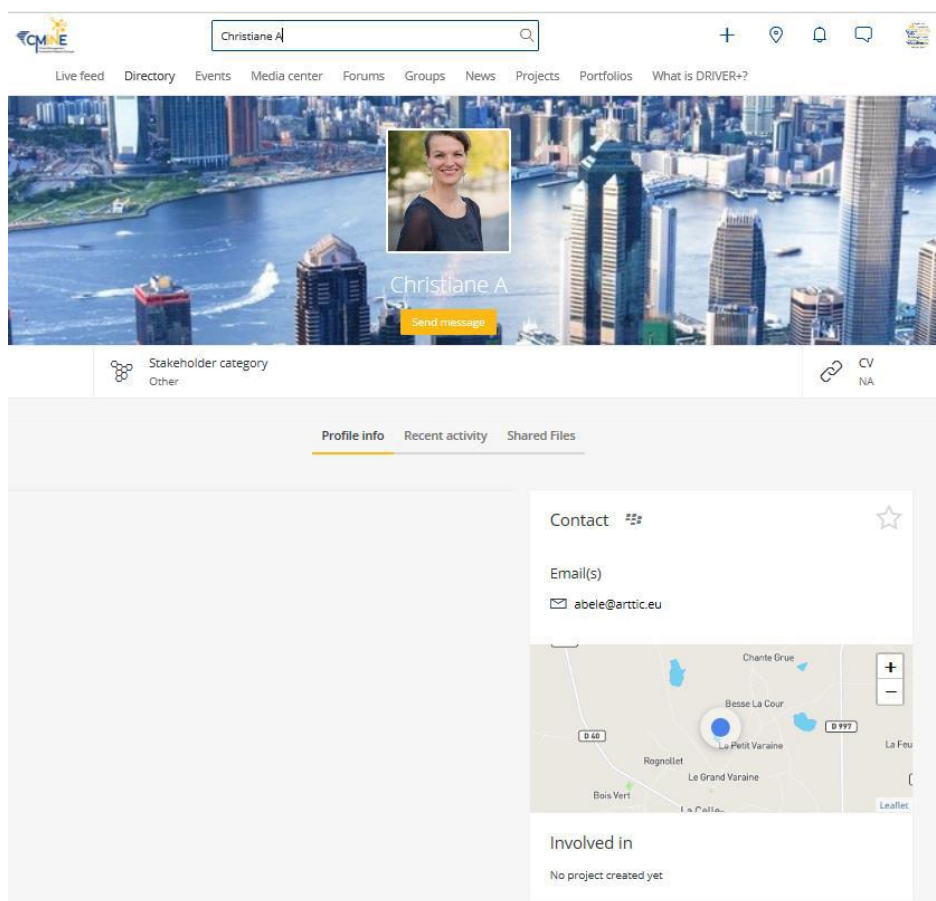
Portfolio and Jobs

The planned portfolios and jobs pages will be deactivated during the initial phase as it was agreed to first present the key components of the CMINE, providing a clear and light structure allowing members to easily access the different pages and find what they are looking for. In addition, the portfolio and jobs pages will become more relevant and interesting once the CMINE will have attracted a higher number of subscribers.

The current structure will most probably be amended over time as it is expected that additional demands arise, and parts will be dropped due to decreasing interest. The Community managers will closely follow up and analyse the engagement of members on the pages, stimulating discussions to gather feedback on additional needs and re-structuring and organising the pages accordingly.

Member profile

Each member has a profile page which contains information on recent activity, skills, fields of expertise, events attended etc. Users can use whether they want their information to be visible to all users, to administrator only, or to colleagues (favourite contacts) only.



Focus area 2: Dissemination and External Engagement

Overall objectives and relevance

Implementing concrete and effective actions regarding dissemination and external engagement at an early stage is crucial for the sound and rapid development of CMINE as it will provide the network with the necessary momentum to grow and expand after the closure of DRIVER+. The following concrete actions are planned towards that objective:

- Mapping and engaging with CM networks, organisations and projects that could either feed or be positively affected by CMINE.
- Elaborating draft invitation letters adapted to the different target groups (networks/projects/individuals) (ready by end of August 2019)
- Development of a CMINE leaflet (ready by end of August 2019)
- Active promotion of the network on Social Media via the CMINE Twitter account and the DRIVER+ Linked-In Page
- Establishing a list of external CM media/publications in order to widen the outreach of CMINE-related communications

Networks

A list containing the most relevant networks to help CMINE grow its membership as quickly as possible has been elaborated, including both general CM networks, as well as networks specialised in thematic areas related to the CMINE task groups. The document is not definitive and will expand over time in line with the domains covered by new Task Groups. We already have existing relationships with some of these networks; this list will be continually reviewed and enlarged to ensure the KPIs are met.

General CM networks already identified include:

- TIEMS (<http://www.tiems.info>)
- FEU (<https://f-e-u.org/index.php>),
- THW (https://www.thw.de/EN/Homepage/homepage_node.html)
- Johanniter (<https://www.johanniter.de>)
- FNSPF (<https://www.pompiers.fr/federation-nationale-des-sapeurs-pompiers-de-france>)
- CFOA (<https://www.cfoa.net>)
- AFOA (<https://www.foa.org.uk>)
- CTIF International Association of Fire and Rescue Services (<https://www.ctif.org>)
- EUSTAFOR (<https://eustafor.eu>)
- EVOLSAR (<http://www.evolsar.eu>)
- Red Cross Societies (national, European and International level)
- IFAFRI
- EENA

A comprehensive database of CM organisations has been collated using desk research and detailed discussions with partners, other CM projects and the European Commission, which will include fire and rescue services; paramedics; specialist groups eg USAR; agencies responsible for flood response; fire training colleges; Environment Agency or equivalent; other research projects partners. Each of these entities will be engaged and incentivized to join and contribute to CMINE. Discussions with the DG HOME Community of Users (CoU) are already ongoing and dedicated sessions at future CoU meetings will be planned. These and other international conferences will be used to disseminate CMINE widely and they will generate many networking opportunities with CM experts, practitioners, policy makers and researchers. Every opportunity possible will be used to promote CMINE and its value to the widest CM community.

The Joint Research Centre (JRC) is of course a partner in DRIVER+, so we will continue to work very closely with our colleagues in the JRC and we will also develop our relationship with the Disaster Risk Management Knowledge Centre (DRMKC) and the European Response Coordination Centre (ERCC) to maximise the awareness and outreach profile of CMINE within these important organisations. Discussions with the DRMKC are ongoing with regards to the sustainability of DRIVER+ (WP954) and the possibility of establishing a number of Centres of Expertise.

Individuals

The first and most important task is to ensure that all DRIVER+ partners are registered on CMINE. Partners will then be encouraged to invite their colleagues, peers and wider contacts to join. To make this as easy as possible for partners, we will draft invitation email templates that can be quickly personalised.

All practitioners, observers and experts that have participated in, or attended, the Trials will be invited to register on CMINE. An email template will be created that the Trial Directors can send to all participants.

Everybody that attended the I4CM and PRDR events will also be invited to register, as will the solutions providers. And not just those that participated in the Trials, but also those that responded to the various Calls for Applications. They will also be invited to forward them to like-minded colleagues and peers.

Finally, the CMINE Task Group members will be asked to register and to invite their peers and colleagues in the various thematic domains.

Links to other projects

Effectively engage with other CM projects and initiatives is crucial to build the momentum necessary to CMINE's growth. On the one hand, CMINE will feed on the wealth of knowledge provided by these projects while providing them with a common platform to discuss, share results and discover the latest innovations in CM under specific thematic areas. Engagement with external projects will build upon the External Cooperation work already been carried out within DRIVER+.

Concrete efforts undertaken to engage with other projects include:

- Listing of relevant projects/initiatives under CMINE thematic areas
- Developing pathways for partnership with these projects via online (social media, website, newsletters) and offline (participation to projects' workshops and conferences) communication activities
- Promotion of CMINE at well-established conferences in Europe to meet and engage with new projects and initiatives in the field

The preliminary list of identified CM organisations, networks and projects per specific thematic areas include:

Table 5.1.: List of identified CM organisations, networks and projects

Thematic Area	Entity
WILDFIRES	Expert Group on Forest Fires
WILDFIRES	FIRE-IN
WILDFIRES	The Federation of the European Union Fire Officers Associations (FEU)
WILDFIRES	Fédération Nationale des Sapeurs Pompiers de France (FNSPF)
WILDFIRES	Chief Fire Officers Association (CFOA)
WILDFIRES	International Association of Fire and Rescue Services (CTIF)
WILDFIRES	The European State Forest Association (EUSTAFOR)
WILDFIRES	Eurosprinkler
WILDFIRES	European Fire Safety Alliance (EFISA)
WILDFIRES	The Confederation of Fire Protection Associations Europe (CFPA Europe)
WILDFIRES	Fire Safe Europe
WILDFIRES	European Fire Academy
WILDFIRES	The Global Fire Monitoring Center (GFMC)
WILDFIRES	Mediterranean Forest Fire Fighting Training Standardisation (MEFISTO)
WILDFIRES	European Firefighters Unions Alliance (EFFUA)
WILDFIRES	The association of well-established certification bodies of Europe working in the fire and security sectors (EFSG)
WILDFIRES	PAU COSTA Foundation
VOLUNTEER MANAGEMENT	Pan-European Network of Customs practitioners (PEN-CP)
CBRN	e-NOTICE
CBRN	ENCIRCLE
VOLUNTEER MANAGEMENT	The European tri service interoperability platform (EFRIM)
VOLUNTEER MANAGEMENT	The International Emergency Management Society (TIEMS)

Thematic Area	Entity
VOLUNTEER MANAGEMENT	PKAVS Third Sector Interface
VOLUNTEER MANAGEMENT	Association of Volunteer Managers
VOLUNTEER MANAGEMENT	Doing Good Leeds
VOLUNTEER MANAGEMENT	VOST Europe
FLOODS	DAREnet
FLOODS	European Centre for River Restoration (ECRR)
FLOODS	European Environmental Bureau (EEB)
FLOODS	STAR-FLOOD
Crisis management	MEDEA
Crisis management	ARCSAR
SECURITY	EXERTER
SECURITY	ILEAnet
SECURITY	Europol
MEDICAL EMERGENCY	NO FEAR
EMERGENCY SERVICES (112)	European Emergency Number Association (EENA)
SECURITY	CENTRIC
SECURITY	MediLabSecure
SECURITY	SectransNAS
SECURITY	JCBRN Defence COE
SECURITY	International Security and Emergency Management Institute (ISEMI)
SECURITY	ICI International CBRNE Institute

The CMINE Leaflet

The CMINE leaflet offers a condensed and visually pleasing overview of the added value of CMINE and will be used as a support for a variety of communication activities surrounding the network.

Branding

The CMINE visual identity has already been developed and reinforces the DRIVER+ identity through the use of its common typeface and colourways. It has, however, been designed so that it can sit on its own and exist outside of the project, once this has concluded in April 2020.

The CMINE branding has been used both online and in a selection of printed material. It will be applied across all future communications materials, in all media, in a consistent manner to ensure the integrity of

the brand, as it becomes the recognised face of the Crisis Management community, bringing other networks together under one umbrella identity.



Figure 5.1.: CMiNE Logo including slogan

Online

We will explore the options and opportunities of promoting CMiNE on the Portfolio of Solutions, including the possibility of a series of banner ads. This would be an obvious opportunity to ‘speak’ directly to the prospective target audience.

Ultimately, we will look to cement CMiNE’s position via the Centres of Expertise (CoE), which are being explored as one option to deliver the sustainability of DRIVER+. CMiNE will be ‘promoted’ through the use of signage, video, printed collateral etc and may well incorporate aspects of joint branding with the respective CoEs.

Social media

Social media are extensively used to raise awareness about CMiNE, make the community grow and share CMiNE’s results and achievements. To that end, a dedicated Twitter account has been created, currently reaching 59 followers. Social media activity surrounding CMiNE will be carried out towards a threefold objective:

- Raise awareness about CMiNE and incentivize relevant external entities (networks/projects/organisations/experts) in CM to join and contribute to the network
- Stimulate activity and disseminate preliminary results obtained under each thematic area
- Communicate about CMiNE activities (dedicated workshops/presence at third-party events)

A series of short video interviews with the Head Chair and two of the thematic chairs have been published, explaining the role and structure of CMiNE. These can be expanded at future events to cover other topics, as appropriate. CMiNE will also be intensively promoted on LinkedIn, via simple posts or the dissemination of articles and white papers. A high degree of activity and engagement with thematic chairs and external stakeholders is expected on a regular basis.

Mass media

A list of key specialised and general media has been drafted via desktop research and use of DRIVER+ internal networks to raise awareness and disseminate CMiNE’s results. Press Releases and articles will be elaborated to communicate about CMiNE’s milestones and achievements to the external world.

Particular attention will be devoted to ensuring that partners widely disseminate CMiNE-related information via their own internal networks and media to maximise outreach and impact.

Current achievements include:

- A dedicated supplement on DRIVER+ and CMINE for the Crisis Response Journal is foreseen for October 2019. The journal reaches 3,000+ policy makers, experts, practitioners, researchers in CM. We will investigate similar opportunities with other specialist media publications
- An article about CMINE Wildfire Thematic Group to be published in the October issue of Fire Magazine. FIRE is the leading magazine for all the latest fire news on fire safety and prevention, technology and products, the fire community and events. FIRE magazine is highly respected among fire and rescue services as an invaluable tool that informing you on the latest initiatives and operational procedures within an ever-changing industry.

Efforts to engage with external media about CMINE will build upon the work already carried out as part of DRIVER+ external media relations. The initial list was expanded with media & publications relevant to the CMINE thematic groups.

Table 5.2: Preliminary list of identified media/publications relevant to CMINE

Preliminary list of identified media/publications relevant to CMINE	
Ambulance Today	
Asia Pacific Fire Magazine	
Crisis Prevention	
Crisis Response Journal	
Critical Communications Magazine	
DRMKC newsletter (JRC)	
Emergency Services Times	
EU Horizon Magazine	
EU research*eu focus	
EU research*eu results magazine	
Euractiv	
European Data Quarterly (an open access journal presenting policy-relevant data)	
Fire & Rescue/ Industrial Fire Journal	
FIRE	
Get resilient	
HR Grapevine	
IFRC Psychosocial Centre quarterly Magazine	
International Firefighter Magazine	
International HR Advisor	
International Journal of disaster Resilience in the Built environment	
International Journal of Emergency Management	
International Journal of Mass Emergencies and Disasters	
Journal of Contingencies and Crisis Management	
Journal of Disaster Prevention and Management	

Preliminary list of identified media/publications relevant to CMINE
Journal of International Organisation
New Europe
People Management
Police Oracle
Politico
PreventionWeb News
Radio Resource Media Group
Security Europe
The European
TIEMS Newsletter

Conferences

Identify, through desk research, the leading international conferences in the sector, many of which are already known of course. Contact them and secure wherever possible speaking slots in plenary sessions, workshops and panel discussions. To be agreed, but it is anticipated that the CMINE Chairs and some Task Group members will take up these speaking opportunities.

Some conferences may well also offer stand (booth) space free of charge.

These conferences also offer excellent networking opportunities to disseminate the benefits of CMINE further to prospective members.

Next steps

A number of items will be needed in the short term to help promote CMINE and will be used to raise the awareness of the network right across the Crisis Management sector. These include:

- Membership pack.
- Press releases – targeted messages for each of the Task domains.
- Series of one and two page pre-prepared articles for each theme for use in the specialist press.
- Presentation for conferences – these will of course evolve over time as CMINE grows in popularity and reach.
- Short videos introducing and explaining CMINE - what it is and the benefits of joining – we will investigate options including an infographic and to camera interviews.

Validation and Quality Control

Currently, CMINE serves as a platform for organising two types of activities:

1. Disseminating results and soliciting feedback on interim and final (draft) results of the DRIVER+ project;
2. Activities initiated within CMINE and distinct from the studies in the DRIVER+ project.

In the former case, input from CMINE might be incorporated in DRIVER+ deliverables, which are subject of internal and external quality control following FP7 and DRIVER+ internal rules and procedures.

In the latter case, validation and quality control are performed at three levels:

First, the partially open nature of the work of the Task Groups, their composition seeking to represent diverse stakeholder groups, including practitioners and policy-makers, and the intention shared by the Task Groups to publish their results in relevant journals and conferences upon successfully passing through rigorous peer-review.

Second, draft roadmaps, interim and final results are reviewed by the CMINE Head Chair (who is an experienced researcher), who also participates in Task Group physical and virtual meetings discussing, elaborating and refining goals, objectives, and intended outputs, methodologies, processes and timelines. When necessary, interim and final results are additionally evaluated by one or more reviewers, who are not members of the Task Group.

Finally, the Task Group roadmaps and reports are presented to and approved by the CMINE Steering Committee, representing a variety of considerations and directing the development of CMINE.

Sustainability

Overall objectives and relevance

The CMINE is part of DRIVER+, but the ambition level is that the CMINE outlives the DRIVER+ project and develops into a long-term, largely independent and self-driven initiative. Hence, the overall objective of the CMINE Sustainability plan is to determine the long-term vision, governance structure of the CMINE (post-project) and identify future funding mechanism.

Sustainability is regarded as one of the most important objectives of third-party funded research projects. Without an enduring positive societal impact, most publicly funded research projects are perceived to have missed their objective. However, in reality, all too often ambitious research projects end at the point when the last funding resources are exhausted. When the project has come to an end, researchers start looking for new opportunities and funds to be able to continue their work and to secure their living.

In this context, one of the most important question is how a research project can continue its work or how outcomes (e.g. solutions, trainings, networks) can be taken up by the target audience without the support of external cash inflows.

There is no easy answer to this question. Many research projects have not succeeded in ensuring sustainability and the multitude of abandoned project websites speak for themselves.

Nevertheless, this section tries to explore ways to ensure that the outcomes of the DRIVER+ project will have a lasting effect for society in general and the Crisis Management community in particular. Next to the Portfolio of Solutions (PoS), the Trial Guidance Methodology (TGM) and the Test-bed, the CMINE is one of the main outcomes of the DRIVER+ project. Its goal is to increase the 'shared understanding' of Crisis Management, to connect the Crisis Management community and ultimately to support the market uptake of Crisis Management solutions, as described in the CMINE Guidance Document.

The CMINE is now at the formation phase and is evolving to establish itself into a vibrant online and in-person community of Crisis Management professionals across the EU (and beyond).

The following section outlines several possible governance models and related funding mechanisms and concludes with a preliminary discussion.

CMINE Governance models and funding mechanism

It is important to note that the work of the CMINE Support Office is of crucial importance for the day-to-day management of the CMINE and will require external funding resources. The Task Group selection procedure is quite work-intensive and the general programme management task of the CMINE requires additional resources. The first weeks of the actual CMINE implementation have shown that, in total, a project management officer would need to be hired to work at least two days per week to support the

initiative and to manage the work of the Steering Committee. The table below gives an indication on the current workload and costing structure of the CMINE activities.

Table 7.1: Estimated future workload CMINE activities (based on current activities)

CMINE Funding category	Estimated workload/costs
Support Office/Steering Committee Coordinator	4 working days per week (2 working days for support office coordinator and 1-2 days Steering Committee coordinator (32 hours)
Helpdesk (technical)	0,5 working days per week
Travel cost (CMINE in-person meetings) for Task Group Members	90.000 € (30 Task Group members, 3 meetings per year, 1,000 € per meeting)
Logistical costs for CMINE in-person meetings	
Hosting of Hivebrite Platform	Approx. 20.000 € per year
Costs for Community Manager	
CMINE Head Chair position	

CMINE as an integral part of the European Commission's Security Governance framework (Crisis Management and Disaster Resilience pillar)

A natural framework for the integration of the CMINE could be the Community of Users on Secure Safe and Resilient societies, a European Commission (DG HOME) initiative (CoU). Currently, the Community of Users initiative is an informal network. There are plans to further develop the CoU into a more formalised initiative during the upcoming years. Ideas for this transformation are still in the conceptual phase and DG HOME is liaising with a broad array of stakeholders on how to best move forward with this development. The CoU, at the moment, consists of eight Thematic Groups (ThGs) (namely: standardisation coordination, CBRNE, Natural Disasters, Citizen Awareness, Critical Infrastructure Protection, Fight against Crime and Terrorism, Digital Security and Border Security). During the CoU events, a number of these themes play a central role and various stakeholders interested in these particular themes are invited to exchange ideas. Moving forward, these Thematic Groups are envisaged to play a more prominent role in the CoU governance structure; a head for each Thematic Group would be appointed and they could provide input to the more strategic bodies that are currently envisaged to lead the CoU: the high-level steering board and the coordination board.

The high-level steering board will be tasked with outlining the long-term strategy and direction of the CoU. Members of this board will, amongst other responsibilities, develop policy recommendations. The board is envisaged to be comprised of representatives of EU agencies, Member States and other actors on the Directorate General level. The high-level steering board will be supported by the coordination board that will serve as a link pin between the High Level steering board and the various thematic groups. Thereby, the coordination board will have a filter function (filtering the input from the ground, i.e. the Thematic Groups) and to coordinate the activities of the CoU on a more practical level (i.e. the implementation of the CoU mandate, development of briefs, etc). This coordination board would consist of the heads of the various Thematic Groups, DG representatives and various MS experts.

The Thematic Groups are envisaged to play a crucial role in the CoU governance model as they would serve as the liaison between the various stakeholders and experts working within a certain theme and those who

are involved in the domain of security on the policy level. They could link up national initiatives and, thereby, foster and facilitate cooperation at the European level. As this linking role is close to what the CMINE is intending to do, the CMINE could potentially provide a Head of the Thematic Group on Disaster Risk Reduction. A DRIVER+ representative could take on the role of the Chair and be the person responsible for a step-by-step integration of the CMINE into the CoU governance framework.

At the same time, the already established organisational and already established governance structure of the CMINE could serve as a blueprint for the structuring of other thematic pillars within the Community of Users.

An integration into the European Commission's security related governance framework would require reserving a dedicated budget line for the continuation of the initiative. In the short run, until the end of the DRIVER+ project, the Chair of a dedicated DRR pillar within CoU could be funded from the DRIVER+ project budget. The Community Management Tool, developed and hosted by ARTTIC, is an open source platform which allows research communities to better organise their work by providing a multifunctional communication platform and knowledge repository.

The concrete scenario could look like as follows:

- CMINE as Chair of the Thematic Group (ThG) on Natural Disasters. In this capacity, the CMINE leads the ThGs and collects ideas, issues and challenges which then can be voiced to the CoU Coordination Board. At the same time, the CMINE serves as a liaison between the CoU and local and regional initiatives in the field of Natural Disasters.
- The CMINE will also play a more active role in the planning and coordination of the CoU events.
- CMINE representative as part of the Coordination Board. Here, the CMINE works together with other Chair of Thematic Groups, DG representatives and Member States experts to support the European Commission in developing recommendations and briefs and in supporting the implementation of the CoU mandate.
- The CMINE can serve as the platform to facilitate the communication and information exchange within the Thematic Group of Natural Disasters outside the CoU meetings. On the CMINE online platform, members of the Thematic Group can share files, discuss challenges and ideas, support Task Groups (or start Task Groups), etc. In this capacity, the virtual platform can serve as the 'glue' of the Thematic Group in between the in-person CoU meetings. In this regard, the CMINE could also function as a support body for the organisation of the in-person CoU events. On the online platform, members of the Thematic Group could for instance voice their interest for panels and panellist, can pre-start discussions on certain topics, can follow-up on discussions after the meeting, etc.
- As the CMINE ultimately intends to attract various types of stakeholders, including policymakers, the CMINE could serve as a platform where policymakers (from different DGs such as DG HOME, DG ECHO, DG RTD, DG CLIMA, DG DEVCO) can directly communicate with practitioners, researchers, industry representatives and civil society on the other hand.
- The CMINE would also provide all members of the Thematic Group with direct access to the DRIVER+ project outcomes (such as the PoS, Test-bed, Trials, etc).
- The CMINE could also serve as a living calendar in which Thematic Group members can upload and share relevant calendar activities.

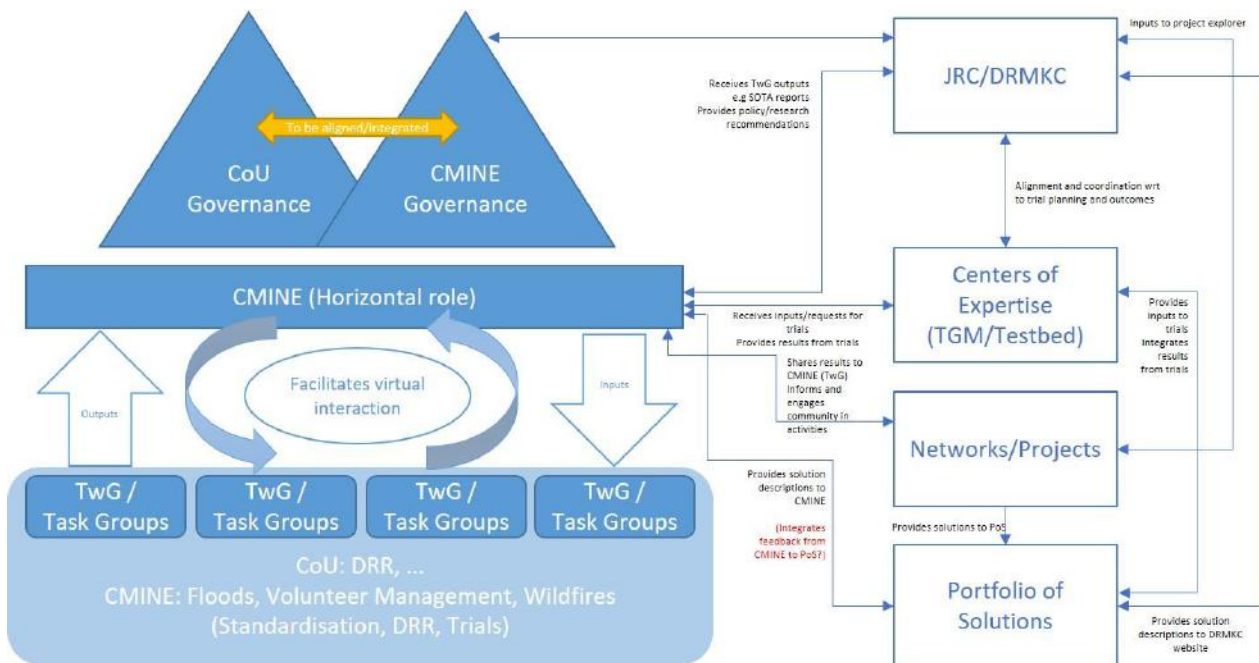


Figure 7.1. CMINE as an horizontal element of the CoU structure (Disclaimer: Has to be discussed and confirmed with DG HOME and JRC/DRMKC)

Adoption of the CMINE through Centres of Expertise (CoE)

An alternative scenario might be the formal adoption of the CMINE through a Centre of Expertise or other stakeholders which might see an advantage for their organisation. If the DRIVER+ team manages to engage a sufficient number of networks and individual stakeholders, it would help the CoEs to position themselves in the wider crisis management domain and shed light on their work. Adopting the CMINE could increase their exposure and, in the case of CoEs also function as coordinating platform. It would also be easier to find suitable project managers for the CMINE Support Office within an already existing organisation related to crisis management. For the next three years, the funding of the CMINE platform is secured by the European Commission which might provide an additional incentive for CoEs to adopt the CMINE. Furthermore, the CMINE online platform could function as a coordination platform between the various CoEs which would give the opportunity to closely interact and exchange knowledge.

A few CoEs that have been identified up until now, might be interested in formally adopting the CMINE [which ones], others have a too narrow focus to take over this task. To identify more suitable organisations, the CMINE should be presented during the DRIVER+ Sustainability Workshop in Brussels in October 2019.

Next steps:

- Identify possible CMINE adopters.
- Present CMINE to stakeholders during DRIVER+ Sustainability meeting.
- Follow-up with interested stakeholders after meeting.

Preliminary Discussion of the scenarios

To institutionalise the CMINE through an integration into DG HOME's Security Framework (CoU-CMINE) currently seems to be the most promising and realistic scenario at hand. However, it is also the most sensitive and time-consuming process which very much depends on the political will and commitment of the policy-makers involved. If DG HOME does not adopt and fund the CMINE, a small European Commission grant (DG HOME, DG REA) might be the only way to sustain the CMINE after 2020. ARTTIC or 3 other WP Partners could remain the Point of Contact towards Hivebrite but only if funding will be secured. If funding cannot be secured, ARTTIC would take care of the communication towards the existing user base.

CMINE Support activities

CMINE Support Office

The CMINE is structured along two vertical themes: wildfire and flood as well as a horizontal one: volunteer management earthquake. Each theme will be led by a dedicated Theme Chair who will serve as coordinator of its Task group(s) as well as the main contact person for the members of the CMINE regarding the respective topic. The Head Chair will oversee the activities taking place in the different themes. The Steering Committee is concerned with the strategic development of the CMINE. While the Theme Chairs are expected to manage and document their work independently, the Support Office will support and assist the Head Chair in his activities regarding virtual and in-person meetings (setting up calls etc.). Furthermore, the Support Office will be in charge of disseminating the agenda prior to meetings, to take minutes during the meetings and to, subsequently, share those minutes with the attendees after such meetings. The Support Office will provide support to the Theme Chair in the coordination and organisation of the in-person meetings of the Task Group. As the project matures, additional meetings are foreseen to which members/interested professionals will be invited. Each Task group will organise at least three in-person meetings. These are envisaged to be held back-to-back with already existing meetings.

Responsibilities

Overall coordination

- Liaise with Steering Committee (through Support Office Steering Committee coordinator)
- Liaise with ARTTIC on technical aspects of COCP and logistical support for meetings

Coordination of meetings

- Collect availability of Chairs (for Chair meetings) and schedule meetings accordingly
- Disseminate meeting agendas (prepared by Head Chair)
- Set up the virtual meeting space (using Skype for Business)
- Attend Chairs Meetings and take minutes
- Provide content support for all in-person meetings
- Co-organise annual CMINE meeting
- Co-organise Task group meeting

Task Group Support

- Attend in-person Task group meetings
- Gather and file CVs received through call for experts
- Gather minutes of Task Group meetings (and archive them)
- Gather reports to be submitted of all Task Groups
- Support and coordinate Roadmap development
- Support development of new Task Groups

Communication

- Maintaining email inbox (answering emails, forwarding emails to the relevant Theme Chair, etc.)
- Ensure prompt response to enquiries and information requests from CMINE members (i.e. within 48 hours) Preparation of (draft) presentational documents for use by the CMINE (e.g. presentations, meeting talking points, etc.) (promo-material)
- Preparation of (draft) documents and content for the Head Chair as needed (i.e. ad hoc requests)

Reports

- Maintain all CMINE documentation and materials (archive)
- Develop CMINE Guidance Document
- Coordinate production of annual CMINE report
- Co-Coordinate CMINE relevant DRIVER+ progress report inputs

CMINE Steering Committee Coordinator

Overall coordination

- Liaise with CMINE Support Office (through CMINE Support Office coordinator)
- Liaise with Steering Committee Members on strategic development of CMINE

Coordination of meetings

- Collect availability of Steering Committee and schedule meetings accordingly
- Disseminate meeting agendas
- Set up the virtual meeting space (using Skype for Business)
- Attend Steering Committee Meetings and take minutes
- Provide content support for all in-person meetings

Communication

- Maintaining email inbox (answering emails, forwarding emails to the Head of the Steering Committee, etc.)
- Ensure prompt response to enquiries and information requests from Steering Committee Members (i.e. within 48 hours) Preparation of (draft) presentational documents for use by the CMINE (e.g. presentations, meeting talking points, etc.) (promo-material)
- Preparation of (draft) documents and content for the Head of Steering Committee as needed (i.e. ad hoc requests)

Reports

- Maintain all Steering Committee documentation (archive)
- Co-develop CMINE Strategy and Workplan document

Key Performance Indicators (KPIs)

In order to measure and monitor the successful implementation of the CMINE, a number of Key Performance Indicators (KPIs) have been developed. The KPIs will serve as a guiding framework in assessing the progress and direction of the CMINE. The KPIs in below present the goals of the CMINE in the short-term (October 2019) and medium-term (April 2020) KPIs. The KPIs have been co-developed by the WP953.1 task team and the DRIVER+ Project Officer.

Table 9.1. Short-Term KPIs (October 2019)

KPI description	KPI	Issue area	Responsible Partner	KPI achieved (yes/no)
CMINE overall structure/set-up				
No. of projects and networks	>40	Dissemination and External Engagement	PSCE	

invited to join CMINE Online Platform				
No. of linked networks on CMINE Online Platform	>5	Dissemination and External Engagement	PSCE	
No. of related H2020 network projects linked on CMINE Online Platform	>3	Dissemination and External Engagement	PSCE	
No. of related projects (H2020 and other) linked on CMINE Online Platform	>5	Dissemination and External Engagement	PSCE	
No. of invited individual stakeholders (DRIVER+) invited to join the CMINE Online Platform	100%	Dissemination and External Engagement	PSCE	
No. of registered individual stakeholders (DRIVER+) on the CMINE Online Platform	60%	Dissemination and External Engagement	PSCE	
No. of invited individual stakeholders (DRIVER+ external) invited to join the CMINE Online Platform	>200	Dissemination and External Engagement	PSCE	
No. of registered individual stakeholders (DRIVER+ external) on the CMINE Online Platform	>100	Dissemination and External Engagement	PSCE	
No. of representatives	>10	Dissemination and	PSCE	

of Civil Protection Authorities registered		External Engagement		
Engaging different types of stakeholders (policy maker, practitioner, private sector, NGOs and CSOs, science and research, training and education, media, standardisation)	Balanced split between stakeholder groups	Dissemination and External Engagement	PSCE	
CMINE Online Community Platform activity				
No. of internal persons (DRIVER+) starting a discussion thread	>10	Community Management	ARTTIC	
No. of external persons (non-DRIVER+) starting a discussion thread	>5	Community Management	ARTTIC	
No. of people engaged in all discussion threads sharing informative content (uploading files etc.)	>20	Community Management	ARTTIC/PSCE/Chairs	
Solutions from PoS commented upon	>5	Community Management	ARTTIC	
Task Groups				
Task Group members of different geographic backgrounds	>10 EU MS / >10 EU MS	Support Office activities	Chairs/Support Office (Ecorys)	

Different types of stakeholders within one Task Group	>2 different types of stakeholders per Task Group >2 different types of stakeholders per Task Group	Support Office activities	Chairs/Support Office (Ecorys)	
No. of applications following Call for Experts	>8 per Task Group >8 per Task Group	Support Office activities	Chairs/Support Office (Ecorys)	
External Impact				
No. of news articles on CMINE in external press	>2	Dissemination and External Engagement	PSCE	
No. of mentions on social media channels (with CMINE hashtag)	>25	Dissemination and External Engagement	PSCE	
No. of followers on CMINE Twitter account	>50	Dissemination and External Engagement	PSCE	

Table 9.2. Medium-term KPIs (April 2020)

KPI description	KPI	Issue area	Responsible Partner	KPI achieved (yes/no)
CMINE overall structure/set-up				
No. of projects and networks invited to join CMINE Online Platform	>60	Dissemination and External Engagement	PSCE	
No. of linked networks on CMINE Online Platform	>10	Dissemination and External Engagement	PSCE	
No. of related H2020 network projects linked on	>5	Dissemination and External Engagement	PSCE	

CMINE Online Platform				
No. of related projects (H2020 and other) linked on CMINE Online Platform	>10	Dissemination and External Engagement	PSCE	
No. of individual stakeholders (DRIVER+) invited to join the CMINE Online Platform	100%	Dissemination and External Engagement	PSCE	
No. of individual stakeholders (DRIVER+) registered on the CMINE Online Platform	90%	Dissemination and External Engagement	PSCE	
No. of individual stakeholders (DRIVER+ external) invited to join the CMINE Online Platform	>400	Dissemination and External Engagement	PSCE	
No. of individual stakeholders (DRIVER+ external) registered on CMINE Online Platform	>200	Dissemination and External Engagement	PSCE	
No. of representatives of Civil Protection Authorities registered	>30	Dissemination and External Engagement	PSCE	
Engaging different types of stakeholders (policy maker, practitioner, private sector, NGOs and CSOs, science and research, training and education,	Balanced split between stakeholder groups	Dissemination and External Engagement	PSCE	

media, standardisation)				
Cross-thematic Task Groups (synergies) ¹³	>2	Support Office	Chairs/All	
CMINE Online Community Platform activity				
No. of internal persons (DRIVER+) starting a discussion thread	>20	Community Management	ARTTIC	
No. of external persons (non-DRIVER+) starting a discussion thread	>15	Community Management	ARTTIC	
No. of people engaged in all discussion threads sharing informative content (uploading files etc.)	>50	Community Management	ARTTIC/PSCE/Chairs	
Solutions from PoS commented upon	>15	Community Management	ARTTIC	
Task Groups				
Task Group members of different geographic backgrounds	>10 EU MS	Support Office activities	Chairs/Support Office (Ecorys)	
Different types of stakeholders within one Task Group	>2 different types of stakeholders per Task Group	Support Office activities	Chairs/Support Office (Ecorys)	

¹³ The rows which are highlighted in orange are newly added KPIs (medium-term KPIs) .

No. of applications following Call for Experts	>8 per Task Group	Support Office activities	Chairs/Support Office (Ecorys)	
External Impact				
No. of news articles on CMINE in external press	>8	Dissemination and External Engagement	PSCE	
No. of mentions on social media channels (with CMINE hashtag)	>75	Dissemination and External Engagement	PSCE	
No. of followers on CMINE Twitter account	>200	Dissemination and External Engagement	PSCE	

Below a brief description for each KPI is presented.

- No. of projects and networks invited to join on the CMINE Online Community Platform
The CMINE intends to function as an overarching network connecting already existing initiatives and networks. In order to make an impact, CMINE will aim to invite representatives of at least 40 projects and networks by October 2019 and 60 by the end of the project to join the CMINE Online Community Platform.
- No. of linked networks on the CMINE Online Community Platform
At least 5 networks need to be linked to the CMINE by October 2019, and 10 by the end of the project.
- No. of related H2020 network projects linked on the CMINE Online Community Platform
At least 3 related network projects need to be linked to the CMINE by October 2019, and 5 by the end of the project.
- No. of related projects (H2020 and other) linked on the CMINE Online Community Platform
At least 5 related projects (H2020 and other) need to be linked to the CMINE by October 2019, and 10 by the end of the project.
- No. of individual stakeholders (DRIVER+) invited to join the CMINE Online Community Platform
All individual stakeholders of DRIVER+ will be invited to join the COCP by October 2019.
- No. of individual stakeholders (DRIVER+) registered on the CMINE Online Community Platform
A total of 60% of all DRIVER+ internal partners (based on mailing list) are expected to register on the COCP by October 2019, and 90% by the end of the project
- No. of individual stakeholders (DRIVER+ external) invited to join the CMINE Online Community Platform
A total of 200 DRIVER+ external stakeholders (individuals) need to be invited to the COCP by October 2019 and a total of 400 individual stakeholders by the end of the project.

- No. of individual stakeholders (DRIVER+) registered on the CMINE Online Community Platform
A total of more than 100 DRIVER+ external stakeholders (individuals) need to be registered on the COCP by October 2019, and a total of 200 individual stakeholders by the end of the project.
- No. of representatives of Civil Protection Authorities registered on the CMINE Online Community Platform
Out of the total individual stakeholders registered 10 need to be representatives of Civil Protection Authorities, by the end of the project this figure needs to increase to >30
- Engaging different types of stakeholders
The CMINE is a network that intends to connect different types of stakeholders, including: policy maker, practitioner, private sector, NGOs and CSOs, science and research, training and education, media, standardisation). Ideally, the mix of CMINE members would represent a balanced split of stakeholders by October 2019 and at the end of the project.
- Cross-thematic Task Groups (synergies)
CMINE values and encourages exchange and interdisciplinarity. By the end of the project, two cross-thematic Task Groups will submit their results and recommendations.
- No. of internal persons (DRIVER+) starting a discussion thread
A total of more than 10 project internal persons are expected to initiate discussions by October 2019 on the COCP, this figure is expected to increase to above 20 by the end of the project.
- No. of external persons (non- DRIVER+) starting a discussion thread
A total of more than 5 project external persons are expected to initiate discussions by October 2019 on the COCP, this figure is expected to increase to above 15 by the end of the project.
- No. of people engaged in all discussion threads or sharing informative content (uploading files etc.)
An important indicator for the active participation in the CMINE is the level of engagement in the discussion threads on theme level. The aim is to have at least 20 members who actively contribute to the discussion threads by opening a new thread or by making comments/replying to questions or comments in the discussion threads by October 2019. By the end of the project, the aim is to have 50 members actively engaging in the discussion.
- Solutions from the PoS commented upon
As part the engagement measurement it is expected that CMINE members make use of the information about solutions provided by the PoS. By October 2019 at least 5 solutions should be commented upon, this figure is expected to rise above 15 by the end of the project.
- Task Group members of different geographic backgrounds
CMINE is a European network and this feature should be reflected in the composition of the Task Groups. By October 2019, members should come from at least 10 different EU member states. By the end of the project, this number should have increased to 15.
- Different types of stakeholders within one Task Group
Besides geographic diversity, CMINE aims to bring together different types of stakeholders. To this end, by October 2019, at least two different types of stakeholder representatives should be present in each Task Group (i.e. policy makers, solution-providers, practitioners, civil protection authorities, academics, etc.). This should have increased to three different types by the end of the project.
- No. of applications following Call for Experts
At least eight applications per Task Group by June 2019.

- Number of news articles about CMINE

A CMINE launch press release will be distributed to known specialist media by project partner PSCE, which will also negotiate at least two articles in the specialist media that focus on the launch and benefits of the CMINE. A strong call to action will be included in all public material, encouraging targeted experts to join the CMINE. This will be added to during the second period to April 2020 so that eight articles in total are published in the specialist media.

- Number of mentions on social media channels (with CMINE hashtag)

At least one tweet will be made each week during the initial period to October 2019, equating to a minimum of 25 relevant tweets. Re-tweets will be in addition to this number. During the period from November 2019 to April 2020, this will be increased to 75 tweets. Further work will also be undertaken on LinkedIn and invitations to join will be sent to relevant experts. To this end a separate CMINE LinkedIn page will be set up and relevant discussions will be uploaded to encourage more people to join CMINE.

- Number of followers on CMINE Twitter account

More than 100 followers will be the target on Twitter by April 2020. The intention is to use social media to expand the potential CMINE membership and to drive people to the COCP.

Annex 1. Action List

[Action List \(CoW\)](#)

Annex 2. Risk and mitigation measures

#	Risk	Issue area	Likelihood	Impact	Mitigation/Management
1	Different ideas on sustainability in Sustainability Board and Steering Committee		Medium	High	SC members are also part of SB Magda Stepanyan. Continuous exchange with DRIVER+ Sustainability task lead.
2	Difficulty to find right funding mechanism		Medium	High	Careful discussion within Steering Committee (reality-check)
3	Timing (and sensitivity CoU)		Medium	High	Close alignment with DG HOME (Philippe Q.)
4	No third party interested to adopt the CMINE		Medium	High	Exploration of crowd-funding/self-governance options.
5	Financing and maintenance of CMINE after the end of the project	3	High	CMINE will not continue and will fail to achieve key objectives	Establish strong governance structure and financing plan before the end of the DRIVER+ project

#	Risk	Issue area	Likelihood	Impact	Mitigation/Management
6	Fail to attract significant members of CMINE	1	Medium	Momentum slows; reduced opportunity for members to network	Increase recruitment efforts through increased communications and dissemination activities
7	KPIs not achieved	1	Medium	Depends which KPIs are not achieved	Constant monitoring of KPIs and adjusting efforts to focus on failing areas
8	Delays in any actions causing snowball effects		Medium	Subsequent delay in another area caused by knock on effect	Continuous management of all areas and regular reviews of planned actions against timing schedule
9	Insufficient time or resources available to deliver plans		Low	Inability to complete actions within agreed timeframe	Regular reviews of planned actions; adjust resources as necessary
10	Lack of content created and distributed		Medium	Insufficient reason for people to join and participate	Regular reviews of content and adjust emphasis as necessary to keep CMINE 'relevant'
11	Low number of CMINE members and a lack of clarity on how to reach out and engage them.				
12	Lack of diversity of stakeholders (currently mainly academia).		High		
13	Limited interest to join the CMINE from DRIVER+ consortium		Medium		
14	Lack of content and activity on the CMINE COCP.		Low		

#	Risk	Issue area	Likelihood	Impact	Mitigation/Management
15	Uncertainty about unique value proposition of the CMINE; lack of comprehensive engagement strategy; unclarity on how to target potential multipliers in a focused manner that will ensure the impact.		Medium		

Annex 8 – Call for Experts Task Group Floods

Are you an expert in the field of floods and flood risk?

Are you excited to explore innovative solutions to pressing challenges in the domain of flood risk management?

Then join the CMINE task group on floods!

Crisis Management Innovation Network Europe - CMINE

The CMINE is an overarching Community of Practice (CoP) for scientists, policy makers, practitioners, civil society and industry representatives working in the field of Crisis Management. The CMINE aims to reduce the fragmentation in the broader Crisis Management landscape, foster synergies between existing projects and initiatives, facilitate knowledge exchange at regional, national and EU level, and to increase the market uptake of solutions.

The aim of the CMINE is to connect existing initiatives active in the field of crisis management and, thereby, functions as an umbrella network. CMINE aims to foster knowledge exchanges between different types of stakeholders who are usually less likely to interact with each other under working conditions.

CMINE is structured along three themes: wildfires, volunteer management and floods. Each theme will be led by a dedicated Theme Chair and the CMINE as a whole will be chaired by the Head Chair. Each theme will establish a task group dedicated to a specific acute challenge that is currently featuring the respective domain. The exact challenge to be tackled by this task group is determined by the Theme Chair and the members of the task group. The ultimate goal of the task group is to develop a solution that will address the selected challenge. This solution can take any shape or form, depending on the challenge and on the ideas and perspectives of the task group. Examples of solutions could be a tool, a mapping, a guideline or a training.

At the launch, the CMINE will exist only virtually but once task groups have been established within each theme; three task group meetings will be held throughout 2019 in addition to a final CMINE meeting (with a presentation of the results obtained by the task groups) during the DRIVER+ Final Conference in February 2020.

Joining one of the CMINE task groups is an excellent opportunity to get involved in the development of a crisis management solutions. The CMINE offers the task group members the chance to collaborate with various types of professionals with different geographical backgrounds and expertise. Through the self-governing task groups, experts have a strong voice and can help shape the direction and working processes of the task group. Moreover, the CMINE is not restricted by complex bureaucratic procedures which makes the development of solutions through this network different from the regular EU procurement cycle. For those interested in addressing present challenges within a particular crisis management domain, the CMINE offers a great opportunity.

The thematic task group on floods

The theme for the task group will be the effectiveness of emergency measures related to flood risk management. At the moment, many countries focus on flood probabilities, flood fighting (to reduce probability) and flood risk (limited awareness). With the CMINE task group, we would like to add emergency measures (evacuation etc.) and show effectiveness in a risk/heat map. There is a need to explain and visualise (calculated) flood risk to determine the effectiveness, advantageousness and accountability of investment on flood risk management measures. Our challenge will be to develop an international worldwide approach to measure the effectiveness of flood measures and an effective and efficient use of open data.

HKV, is an independent consultancy firm for consultancy and research in water management and flood risk and will act as the theme chair of the theme ‘floods’ within CMINE. Our mission is to contribute to a safe and sustainable environment. We do so by providing high quality research, advisory services and products for water and safety in the Netherlands and abroad. We base our work on thorough knowledge of physics, mathematics and decision-making processes for our clients. We develop new knowledge and apply it in close cooperation with our customers, universities and research institutions. The HKV staff is encouraged to show initiative and to act responsibly. Our core values are:

- Focus on the needs of the client
- Knowledge driven
- Entrepreneurial
- Result oriented

The team chairs are Hanneke Vreugdenhil (MSc Applied Physics, Flood Warning Management in Danube Countries, Mass evacuation exercises in South Europe) and Bas Kolen (MSc Civil Engineering, PhD “Evacuation as part of flood risk management” University of Nijmegen, Scientific Director HKV, Research Coordinator TUDelft at Safety and Security Institute). Their areas of expertise are: Hydrology, Flood Risk, Disaster Management, Fluid Dynamics, Evacuation Strategies, Flood Risk Communication, Multiple Layer Safety. They both have international experience (e.g. US, UK, Japan, France, Romania, Czech Republic, Germany, Ukraine, Bulgaria, Slovenia, Greece, Spain, France).

Profile

The task group should consist of practitioners, government representatives, crisis managers, academics, and might be enlarged by highly involved citizens/volunteers.

With the task group, we focus on floods and flood risks. The first task to perform is to find and define a method to visualise and assess the effects of measures on flood risk. The task group will be involved in the development and elaboration of this question and the presentation of the results. In the meantime, other issues, questions and inquiries might pop up and be put forward. The theme chair will collect and prioritize the requests. We might take the initiative to start another task group on one of the proposals/knowledge gaps.

Requirements Flood Risk task group members:

- Proactive attitude
- Willingness and self-initiative to work actively on solving issues related to flood risk
- Access to data (formal EU Flood Directive geo-data) and authorized mandate to hand over the data

Responsibilities

The Theme Chair is responsible for the overall coordination and management of the task group. Nevertheless, the task group members also have certain responsibilities, in particular concerning the continuity of the task group.

Commitment

Once having joined a task group, it is expected that the task group member continues to participate in the task group until the end of the DRIVER+ project duration (until the task group’s objectives have been achieved, April 2020). Such commitment is necessary to ensure the quality of the task group, its deliverables and the CMINE as a whole.

Timely delivery of inputs

In the roadmap document, which is co-developed by the members of the task group, a clear timeline will be produced outlining which deliverables are foreseen and what their deadlines are. Given the relatively short time span of the project (under DRIVER+), it is essential for the task groups to develop roadmaps that are both ambitious and realistic. Nevertheless, the success of the task group depends on the input of the task group members and, therefore, task group members bear the responsibility to provide qualitative inputs in a timely manner.

Proactive attitude

While the Theme Chair leads the task group, task group members are required to take a proactive attitude and to support the Theme Chair in the management of the task group by responding to requests, attending meetings, providing inputs, etc.

Resources

At this stage, there are 4 in-person meetings foreseen for the members of the task group. These meetings will be held back-to-back with other events (such as the Community of Users event and the DRIVER+ I4CM) in order to reduce the burden on the chairs and the members of the task group.

Task group members who are not part of the DRIVER+ consortium will be reimbursed for their travel expenses when attending the task group meetings. Task group members part of the DRIVER+ consortium are requested to exhaust their allocated travel budget before applying for additional funding.

Annex 9 – Call for Experts Task Group Wildfires

Are you an expert in the field of wildfire suppression measures or wildfire field response?

Are you excited to explore innovative solutions to pressing challenges in the domain of wildfires?

Then join the CMINE task group on wildfires!

Crisis Management Innovation Network Europe - CMINE

The CMINE is an overarching Community of Practice (CoP) for scientists, policy makers, practitioners, civil society and industry representatives working in the field of Crisis Management. The CMINE aims to reduce the fragmentation in the broader Crisis Management landscape, foster synergies between existing projects and initiatives, facilitate knowledge exchange at regional, national and EU level, and to increase the market uptake of solutions.

The aim of the CMINE is to connect existing initiatives active in the field of crisis management and, thereby, functions as an umbrella network. CMINE aims to foster knowledge exchanges between different types of stakeholders who are usually less likely to interact with each other under working conditions.

CMINE is structured along three themes: wildfires, volunteer management and floods. Each theme will be led by a dedicated Theme Chair and the CMINE as a whole will be chaired by the Head Chair. Each theme will establish a task group dedicated to a specific acute challenge that is currently featuring the respective domain. The exact challenge to be tackled by this task group is determined by the Theme Chair and the members of the task group. The ultimate goal of the task group is to develop a solution that will address the selected challenge. This solution can take any shape or form, depending on the challenge and on the ideas and perspectives of the task group. Examples of solutions could be a tool, a mapping, a guideline or a training.

At the launch, the CMINE will exist only virtually but once task groups have been established within each theme; three task group meetings will be held throughout 2019 in addition to a final CMINE meeting (with a presentation of the results obtained by the task groups) during the DRIVER+ Final Conference in February 2020.

The thematic task group on Wildfires

Worldwide, the number of wildfires as well as the total amount of burnt areas is increasing every year. Fire is part of a natural cycle in the forests, but the fires we saw in the recent years are no longer natural as they are influenced by human activities. This results in losses of human lives, property and hectares of burned down forests. In 2018 forest fires occurred in countries like Sweden, Germany and Poland, which is not common natural hazard on their territories.

The main goal of this CMINE task group on wildfires will be a creation of a guideline in easy to understand steps how an interested person can use all the available open source data in order to support people on the field suppressing forest fires. Such guideline is needed because in cases of border zone forest fires, data sharing is sometimes difficult even between EU neighbouring countries because data is not recorded in the same format. Furthermore, language is a problem in cases of multinational forest fires suppressing activities. Thus, with our guidelines we will try to organize all expert's knowledge in a way that addresses the shortcomings observed from practice.

Based on this and all climate change anomalies which are present even in the everyday life nowadays we would like to invite professionals that are keen on contributing to fighting wildfires. It does not matter if the person is a firefighter with a main scope on field work or a fire analyst whose job is to do computer based simulations, all contributions are welcome. To this end, this task group intends to gather a team with experts of various (geographic) backgrounds including experts from academia, fire suppressing field, forest managing and SME's in the field of forest fire decision support systems that can combine efforts.

The ‘wildfire’ theme is led by Nina Dobrinkova. Nina works at the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences (IICT-BAS). The institute aim is to coordinate research efforts in computer science and computer technology, as well as to harmonize the scientific achievements of the Bulgarian Academy of Sciences, Bulgarian universities and the Bulgarian computer industry.

Profile

Given the fact that wildfires affect many different social areas, the task group would ideally consists of a variety of stakeholders:

1. Academic representatives
2. SME representative in the field of decision support systems in cases of forest fires
3. Firefighters/suppression oriented people from the field work
4. Fire oriented NGO representatives

Responsibilities

The Theme Chair is responsible for the overall coordination and management of the task group. Nevertheless, the task group members also have certain responsibilities, in particular concerning the continuity of the task group.

Commitment

Once having joined a task group, it is expected that the task group member continues to participate in the task group until the end of the project duration (until the task group’s objectives have been achieved). Such commitment is necessary to ensure the quality of the task group, its deliverables and the CMINE as a whole.

Timely delivery of inputs

In the roadmap document, which is co-developed by the members of the task group, a clear timeline will be produced outlining which deliverables are foreseen and what their deadlines are. Given the relatively short time plan of the project (under DRIVER+), it is essential for the task groups to develop roadmaps that are both ambitious and realistic. Nevertheless, the success of the task group depends on the input of the task group members and, therefore, task group members bear the responsibility to provide qualitative inputs in a timely manner.

Proactive attitude

While the Theme Chair leads the task group, task group members are required to take a proactive attitude and to support the Theme Chair in the management of the task group by responding to requests, attending meetings, providing inputs, etc.

Resources

At this stage, there are 4 in-person meetings foreseen for the members of the task group. These meetings will be held back-to-back with other events (such as the Community of Users event and the DRIVER+ I4CM) in order to reduce the burden on the chairs and the members of the task group.

Task group members who are not part of the DRIVER+ consortium will be reimbursed for their travel expenses when attending the task group meetings. Task group members part of the DRIVER+ consortium are requested to exhaust their allocated travel budget before applying for additional funding.

Annex 10 – Call for Experts Task Group Volunteer Management

ARE YOU AN EXPERT IN THE FIELD OF MANAGING VOLUNTEERS IN CRISIS SITUATIONS?

ARE YOU EXCITED TO EXPLORE INNOVATIVE SOLUTIONS TO PRESSING CHALLENGES IN MANAGING SPONTANEOUS VOLUNTEERS?

Crisis Management Innovation Network Europe - CMINE

The CMINE is an overarching Community of Practice (CoP) for scientists, policy makers, practitioners, civil society and industry representatives working in the field of Crisis Management. The CMINE aims to reduce the fragmentation in the broader Crisis Management landscape, foster synergies between existing projects and initiatives, facilitate knowledge exchange at regional, national and EU level, and to increase the market uptake of solutions.

The aim of the CMINE is to connect existing initiatives active in the field of crisis management and, thereby, functions as an umbrella network. CMINE aims to foster knowledge exchanges between different types of stakeholders who are usually less likely to interact with each other under working conditions.

CMINE is structured along three themes: wildfires, volunteer management and floods. Each theme will be led by a dedicated Theme Chair and the CMINE as a whole will be chaired by the Head Chair. Each theme will establish a task group dedicated to a specific acute challenge that is currently featuring the respective domain. The exact challenge to be tackled by this task group is determined by the Theme Chair and the members of the task group. The ultimate goal of the task group is to develop a solution that will address the selected challenge. This solution can take any shape or form, depending on the challenge and on the ideas and perspectives of the task group. Examples of solutions could be a tool, a mapping, a guideline or a training.

At the launch, the CMINE will exist only virtually but once task groups have been established within each theme; three task group meetings will be held throughout 2019 in addition to a final CMINE meeting (with a presentation of the results obtained by the task groups) during the DRIVER+ Final Conference in February 2020.

The thematic task group on Volunteer Management

Across Europe and in the rest of the world volunteers play an important role in crisis management. Some volunteers are highly specialized and embedded in a strong organizational structure with planned shifts and clear roles. Other volunteers are deployed less frequently and may have a looser affiliation with the crisis management organization. Others again are “spontaneous” volunteers. They show up when a crisis occurs and offer their support on the spot.

Crisis management volunteers are often in the first line of events. Volunteers regularly experience high levels of stress at work, which may cause an increase in sickness levels, risk-taking behavior or security incidents because of impaired judgment. Deploying crisis management organizations have an organizational and a moral duty of care toward their staff and volunteers, especially when they work in high-risk situations that have the potential to lead to distress.

Spontaneous volunteers can both be a great resource as well as a challenge in crisis management. They can provide the much needed extra hands and skills. Sometimes they offer their support to established organizations and in other instances, they form informal, ad-hoc networks that respond to a specific crisis. The fact that the spontaneous volunteers are not affiliated with an organization from the beginning complicates matters such as assessing their skills, backgrounds, organizing them and providing appropriate support in return.

The provision of support and care for spontaneous volunteers is a largely overlooked area in crisis management and social support.

In 2019 the task group for the thematic area Volunteer Management will narrow in on specific challenges in providing psychosocial support to spontaneous volunteers in crisis management

The thematic area Volunteer Management is chaired by Martha Bird of the International Federation of Red Cross Red Crescent Societies Reference Centre for Psychosocial Support (PS Centre). The Red Cross Red Crescent is the world's largest humanitarian organization in the world. 17 million volunteers in 191 countries form the core of the organization that responds every day to crisis ranging from traffic accidents and house fires to large-scale natural disasters, armed conflicts, migration and social crisis.

A task group consisting of representatives of European and International organizations working with and through volunteers in crisis management will be established to:

- Narrow in on a specific challenge pertaining to caring and supporting spontaneous volunteers
- Define gaps and challenges as well as lessons learned on support to new types of volunteers
- Develop a position paper for care and support to volunteers with recommendations for the future.

Profile

The common denominator for members of the task group is having expertise within the fields of supporting and managing volunteers in crisis. This expertise may be developed through practice or research, from working within crisis management, mental health and psychosocial support, volunteering or organizational development.

Responsibilities

The Theme Chair is responsible for the overall coordination and management of the task group. Nevertheless, the task group members also have certain responsibilities, in particular concerning the continuity of the task group.

Commitment

Once having joined a task group, it is expected that the task group member will continue to participate in the task group until the end of the DRIVER+ project in April 2020 or until the task group's objectives have been achieved). Such commitment is necessary to ensure the quality of the task group, its deliverables and the CMINE as a whole.

Timely delivery of inputs

In the roadmap document, which is co-developed by the members of the task group, a clear timeline will be produced outlining which deliverables are foreseen and what their deadlines are. Given the relatively short timespan of the project (under DRIVER+), it is essential for the task groups to develop roadmaps that are both ambitious and realistic. Nevertheless, the success of the task group depends on the input of the task group members and, therefore, task group members bear the responsibility to provide qualitative inputs in a timely manner.

Proactive attitude

While the Theme Chair leads the task group, task group members are required to take a proactive attitude and to support the Theme Chair in the management of the task group by responding to requests, attending meetings, providing inputs, etc.

Resources

At this stage, there are four face-to-face meetings foreseen for the members of the task group. These meetings will be held back-to-back with other events (such as the [Community of Users](#) event in March and September 2019 and the [DRIVER+ I4CM](#) in June 2019) in order to reduce the burden on the chairs and the members of the task group. A final CMINE meeting will be held during the DRIVER+ Final Conference in February 2020, at which the results obtained by the task groups will be presented. Task group members that are not part of the DRIVER+ consortium will be reimbursed for their travel expenses when attending the task group meetings. Task group members, that are part of the DRIVER+ consortium, are requested to exhaust their allocated travel budget before applying for additional funding.

Annex 11 – PRDR 1 – Key outcomes and recommendations

Table 1: Key outcomes discussion item one

How to best facilitate an innovation eco-system in the field of DRR and CM, and the challenges in this respect.	
Required Approach	<ul style="list-style-type: none"> An innovation eco-system should be practitioner-driven to ensure: <ul style="list-style-type: none"> Practical outputs Systematic tests and trials A service-oriented approach
Different expectation towards exploitation	<ul style="list-style-type: none"> European funded projects can result in innovation that not all stakeholders are ready to receive, including the project's partners. Despite an exploitation agreement, uptake may not be happening. Furthermore, not all consortium partners may be interested in, or are relevant for, facilitating the market uptake or results.
Expectation management	<ul style="list-style-type: none"> There is a temptation to expect big solution from big projects and DRR is a huge area. Manageable outputs and milestones have to be considered to allow a sensible measurement of achievements.
Stakeholder engagement	<ul style="list-style-type: none"> Engagement should be multiple-stakeholder-based but the perspectives of practitioners, researchers and end-users on what a "good" result is are very different. There is a need to understand the varied perspectives from the different stakeholders to ensure that a result can be obtained. A co-creation process and involvement of end-users from the very beginning of the project is essential.

Table 2: Key outcomes discussion item two

What are the requirements for a better information and results exchange between research projects, practitioner and knowledge networks	
Requirement 1: Enhancing the current research funding framework	
Joint collaboration of projects	<ul style="list-style-type: none"> Projects funded under the same calls, same topics, should be required to collaborate in order to reach one or a few common results, rather than many separate results dealing more or less with the same thing. For instance: <ul style="list-style-type: none"> Joint starting event, in order to align events and potentially the delivery of results. Joint final meeting. Production of a joint position paper.
Enriched and easy to manage research project database	<ul style="list-style-type: none"> Even if CoU and practitioner networks are helpful in being updated about the community, there's a need for an enriched and accessible online platform about funded projects, and to support exchange of information in between meetings. Central EU repositories (CORDIS/Projects Explorer) should be improved and include:

	<ul style="list-style-type: none"> ○ all the relevant publications ○ key documents and deliverables of the project ○ enriched abstracts ○ videos ● Project coordinators should be able to upload info themselves and proactively provide updates about recent developments in the field/project
Requirement 2: Improving the engagement of national institutions	
Role of institutions	<ul style="list-style-type: none"> ● DRR/DRM institutions that are mandated by the country need to be on board of research / test-bed ● National institutions are often fragmented across different line ministries leading to poor communication and lack of cooperation ● Policy-makers should take ownership of the results. If they call for specific topics/research, they should feel responsible for implementing the results (or facilitating its implementation) ● Importance of identifying most suitable participants in user groups (e.g. one lead (CP) organisation per country, integration of national platforms for DRR and CCA)
Implementation of results	<ul style="list-style-type: none"> ● Important to put the solutions “out there” and give something for free ● IPR issues can hinder the uptake of products developed
Requirement 3: Better understanding the gaps and needs of the target group	
Target the needs	<ul style="list-style-type: none"> ● Make sure that efforts are invested in what is really needed, and not only in what the researchers want to generate
Leverage the knowledge base of practitioners	<ul style="list-style-type: none"> ● Need to upgrade the knowledge level of practitioner organisations on research & innovation, and on Public Private collaboration otherwise they will not be able to receive / appreciate / understand the messages conveyed by research ● Need to change the culture of practitioners, so they can understand and “receive” innovation (“firefighters are not trained to innovate”); this goes along with the need to reduce uncertainty about innovation management (e.g. Whose responsibility is it to generate innovation?)
Requirement 4: Refining the communication approach	
Apply a dynamic and inclusive approach	<ul style="list-style-type: none"> ● Agile information exchange ● Inclusion of all different actors in DRM cycle to ensure connectivity and learn from other actors ● Learning from existing virtual platforms (e.g. provided by DEVCO) to support the establishment of communities to improve accessibility to information ● Use of a common and simple language, preferably in their language ● Sharing of practical messages and information
Demonstrate the EU added-value	<ul style="list-style-type: none"> ● EU level has to bring added value; otherwise local and national levels are the right levels to operate ● Development of a narrative about the European added value

Table 3: Key outcomes discussion item three

What are the requirements for introducing a Pan-European trial and validation framework into the research programming of Horizon Europe	
Explicit trial and validation methods	<ul style="list-style-type: none"> • Need to make use of a standardized methodology for trialling and validation, or at least the requirement to clearly explicate the trial and validation methods to be used • Obligation should be made to every project to explain in their proposal their trial/test methodology
Definition/adoption of standards	<ul style="list-style-type: none"> • Standardisation, is an important method to define a minimum level of service to be provided to end-users; they could act as the “glue” between the various practitioner networks
Validation requirements	<ul style="list-style-type: none"> • Validation should be related to the real needs of the Member States, the latter being responsible for validating whether their needs have been addressed. • Critical for validation process is to take into account the local context • Need of so-called reference scenarios (linked with standardization) for validation. These reference scenarios should be used across several domains and take national legislation into account.

Annex 12 – PRDR 1 – Position paper

DRIVER+ Position paper on a pan-European trial and validation framework to support Disaster Risk Reduction

Adopting the Sendai Framework for Disaster Risk Reduction 2015-2030¹⁴ showed a clear shift from managing disasters to managing the underlying risks. It clearly recognised the strong role that the scientific community can play in an improved understanding of risk and communicating about new knowledge and innovations, and it stimulated the launch of the Disaster Risk Management Knowledge Centre¹⁵ as a contribution to the Science and Technology Roadmap of the EU. With the new rescEU policy framework recently entering into force¹⁶, new ways of collaboration, decision-making, information exchange and of allocating responsibilities will need to be established. In order to share identified lessons, these emerging needs have to be tackled in a harmonised way.

In the past years EU research and innovation projects have delivered extensive results. However, no possibilities exist to assess and compare thoroughly whether the outcomes actually provide valid contributions for the capability development of practitioner organisations that they target. Furthermore, a thorough understanding is often lacking concerning the extent to which the outcomes actually address the defined policy demands. Although some initiatives have been adopted^{17,18} there is still the need to further strengthen the policy-research dialogue on research and demonstration activities in the field of Disaster Risk Reduction and Crisis Management. For this purpose, DRIVER+ project⁶ organised a Policy-Research Dialogue Roundtable (PRDR) in Brussels on 28th February 2019 to explore how a pan-European approach to capability development and innovation management could be supported through a common trial and validation framework that ensures comparability and improves the uptake of results stemming from EU-funded research and capacity building projects.

The discussion was structured around three main questions:

- How to best facilitate an innovation eco-system in the DDR and CM area, in the context of emerging networks of crisis management practitioners and innovation clusters and relevant knowledge networks?
- What would be the requirements for a better exchange of information and results from research projects dealing with solution development, trialling and validation in order to develop a shared understanding regarding basic requirements and core elements, pertaining to a prospective pan-European trial and validation framework resulting in policy-relevant recommendations?
- What would be the requirements to introduce a pan-European trial and validation framework stemming from European funded security research and innovation actions into the currently ongoing research programming of Horizon Europe and/or capacity building projects?

From the debate which took place among the PRDR participants, five key recommendations were identified and framed by the DRIVER+ project. They included:

1/ Making security research more efficient with a **partnership-based approach**

¹⁴ <https://www.unisdr.org/we/coordinate/sendai-framework>

¹⁵ <https://drmkc.jrc.ec.europa.eu/>

¹⁶ Decision (EU) 2019/420 of the European Parliament and of the Council of 13 March 2019 amending Decision No 1313/2013/EU on a Union Civil Protection Mechanism

¹⁷ <https://drmkc.jrc.ec.europa.eu/knowledge/Projects-Explorer#project-explorer/631/projects/list>

¹⁸ https://ec.europa.eu/info/sites/info/files/181116_booklet-forest-fire-hd.pdf

The application of a pan-European trial and validation framework, within the context of a structured capability process in the field of DRR, should not be an isolated effort of only one type of stakeholder. DRIVER+ believes that a DRR innovation ecosystem calls for the establishment of a well-functioning partnership with Member States' authorities, European institutions, the research community and the private sector (industry, incubators). This innovation eco-system should be practitioner-driven to ensure practical outputs, systematic tests and trials, and a service-oriented approach. Achieving this would require the adoption of a co-creation process and the constant involvement of practitioners. This multiple-stakeholder engagement is crucial, as the perspectives of practitioners, researchers and policy-makers on what a "good" result is can be very different.

Such a partnership is a prerequisite for the proper launch of a capability process aimed at reinforcing European security through targeted investments, both in research and in the deployment of capabilities. Experience shows that European funded projects may result in innovations that not all stakeholders are ready to receive, including the project's partners. Despite an exploitation agreement, uptake may not actually occur. Furthermore, not all consortium partners may be interested in, or are relevant for, facilitating the market uptake or results.

The rationale for a partnership-based approach lies in the need to implement an efficient capability process that would allow the common missions, needs and operational requirements to be defined and, at the same time, identify possible solutions matching these requirements in a mid to long-term time frame. In the process, the demand side (responsible for the assessment of needs), the research community (better placed to identify technology and capability gaps) and the private sector (well positioned to develop solutions and provide services) complement each other.

Such a "requirement pull" approach would make security research investments more efficient by linking R&I activities to capability deployment, completing the mission-oriented approach proposed in the Horizon Europe Regulation.

2/ Bridging the "valley of death" with the establishment of a **forward-looking capability planning process in Security**

An approach based on security capability deployment would have the advantage of leading to the definition of shared requirements and standards that, in turn, would facilitate market defragmentation, bridge the gap between research and market, and ensure an acceptable level of strategic autonomy.

A pre-condition to a capability deployment programme would be the establishment of a forward-looking capability planning process in Security. Such a process would identify medium to long-term needs and gaps and would contribute to the definition of EU R&I agendas matching the operational requirements.

The structured dialogue could be managed initially through Working Groups focusing on the different security domains with the objective of starting a pilot phase for a structured capability process. The objective of the pilot phase would be to set the ground for a capability planning process and to identify innovative solutions that match the mid to long-term common operational requirements taking into account the digitalisation process of first responders and the need for interoperability.

The dialogue can later evolve into a more structured partnership where private (both security solution suppliers and operators of infrastructures) and public stakeholders will cooperate to implement the process.

3/ Leveraging the knowledge-base of practitioner organisations with the **creation of national Centres of Expertise** embedded at the EU level

In order to work together within the innovation ecosystem, and applying a pan-European trial and validation framework, information and results exchange between all stakeholders, projects and knowledge networks should be facilitated. In many Member States, national institutions are often fragmented and spread across different line ministries leading to poor communication and lack of cooperation: national harmonisation is required. In addition, policy-makers should take ownership of the results. If they call for

specific topics/research, they should feel responsible for implementing the results, or at least facilitating their implementation.

Furthermore, the workshop participants identified the need to leverage the knowledge-base of practitioner organisations. Many of these organisations lack knowledge and experience on research & innovation, and on Public Private collaboration. This is a barrier to receiving, understanding, appreciating, adopting and implementing the outcomes conveyed by research projects. This requires a change of culture ("fire-fighters are not trained to innovate") and at the same time the reduction of uncertainty about innovation management (e.g. indicate whose responsibility it is to generate innovation). It is recommended that some Centres of Expertise are established at national level to support practitioner organisations in their capability development and innovation management, and to facilitate the access to both research results and relevant stakeholders in the (international) DRR ecosystem. These national Centres of Expertise should work together, and share facilities and experiences in a structured manner; this may potentially be embedded within the to be established Union Civil Protection Knowledge Network¹⁹

4/ Using European standards with the introduction of a **Pan-European framework for trialling and validation** of solutions

Regarding the requirements for introducing a Pan-European trial and validation framework into the European research programme, it was acknowledged by all workshop participants that a standardised methodology for trialling and validation should be adopted, or at least that there should be a requirement to clearly explain the trial and validation methods to be used. This is not always the case, leading to the potential risk of having an imprecise or inaccurate understanding of the outcomes of a trial, of the reliability and validity of its results and its potential benefits for practitioner organisations.

Validation should be related to the real needs of the Member States, being also responsible for validating whether these needs have been properly addressed. It may be beneficial to use standardised reference scenarios for validation. These reference scenarios should be used across several domains and take national legislation into account. Common requirements, standards and certification procedures can ensure harmonisation of demand, interoperability of capabilities, uniform technical performances and better protection from malicious actions. As identified in the 2012 EU Security Industrial Policy²⁰, the definition of common European standards and certification mechanisms may also support reducing market defragmentation.

5/ Improving the 2021-2027 Financial Framework with **increased synergies among the budget lines**

A more efficient approach to the research programming, and the consecutive procurement of solutions should be based on a medium to long-term approach following a systematic process of the definition of needs, identification of capability gaps and definition of common operational requirements that would allow the successful implementation of the solutions, enhancing interoperability and minimising, at the same time, the risk of security breaches.

The 2021-2027 Financial Framework does not address security funding in a coherent and comprehensive manner. Funding for security is still fragmented across different budget lines and there is no structural link between research activities and market uptake. This gap has been successfully overcome in the defence sector with the approval of a European Defence Fund aimed at enhancing competitiveness, innovation and strategic autonomy, which will support research and joint development of capabilities. To effectively

¹⁹ Decision (EU) 2019/420 of the European Parliament and of the Council of 13 March 2019 amending Decision No 1313/2013/EU on a Union Civil Protection Mechanism

²⁰ COM(2017) 479 – A renewed EU Industrial Policy Strategy – 13 September 2017

support a capability process, a coordination mechanism should be established to exploit synergies among the different budget lines.



Annex 13 – CMINE Terms of Use

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Please review these Terms of Use carefully prior to using the Service. If you do not agree with these Terms of Use, please do not use the Service.

The Service comprises a suite of online services provided by ARTTIC S.A.S on behalf the DRIVER+ project, including but not limited to:

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- the Community Messaging Service class emailer,
- Life-Long Email Forwarding Address service ("LEFA"),
- a User-to-User Community Messaging service, and

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otherwise make available in any form or by any means any part of the Service or the Service Content without the express written permission of CMINE.

- (b) You retain ownership of all of your intellectual property rights in any content created, posted, or shared by you, on or through the Service and any personal data, (the “User Content”). CMINE does not claim ownership of your User Content.
- (c) You represent and warrant that: (i) you own your User Content; (ii) the posting and use of your User Content on or through the Service will not violate, misappropriate or infringe on the rights of any third party, including, without limitation, privacy rights, publicity rights, copyrights, trademark and/or other intellectual property rights; (iii) you shall pay for all royalties, fees, and any other monies owed by reason of your User Content; and (iv) you have the legal right and capacity to enter into these Terms of Use in your jurisdiction.

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- (d) You may not use the Service for any illegal or unauthorized purpose. You agree to comply with all laws, rules and regulations (for example, federal, state, local and provincial) applicable to your use of the Service and your User Content, including but not limited to, copyright laws.
- (e) You must not interfere with or disrupt the Service or servers or networks connected to the Service, including by transmitting any worms, viruses, spyware, malware or any other code of a destructive or disruptive nature.
- (f) You must not create accounts with the Service through unauthorized means, including but not limited to, by using an automated device, script, bot, spider, crawler or scraper.
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- (b) CMINE will treat your User Content as confidential information in accordance with CMINE policies, and only use and disclose it in accordance with these Terms of Use and the Privacy Policies.

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CMINE IS NOT LIABLE TO USERS OR VISITORS FOR ANY DAMAGES

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- (b) You agree to indemnify and hold harmless CMINE and its officers, fellows, governing board members, directors, employees and agents, from and against all claims, actions, suits, damages,

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5. User Accounts; Account Termination Policy.

- (a) You agree to provide accurate and complete information when creating or updating your account. You are solely responsible for the activity that occurs on your user account, and you must keep your account password secure. You agree to notify us immediately at <mailto:cmine-helpdesk@projectdriver.eu> of any unauthorized use of your account or other breach of security. You may not use another's account without permission. CMINE may terminate your account if you violate any provision of these Terms of Use or fail to comply with requests concerning your account. User accounts may not be shared, transferred, or sold to other parties, nor are they to be used by or made available to any person or entity except the registered user.
- (b) The rights granted to you hereunder will terminate automatically upon any breach by you of these Terms of Use, unless CMINE otherwise specifically agrees in writing, but the other provisions of these Terms of Use will survive any such termination. CMINE reserves the right at any time in its sole discretion to cease providing any Service Content, to change or discontinue any aspect or element of the Service, or to cease making the Service available.

6. Miscellaneous

- (a) Links to Other Services. CMINE may provide links to websites operated by third parties, including but not limited to, websites operated by DRIVER+ project, as a convenience for our users. CMINE does not endorse or accept responsibility for the content or the use of third-party websites. If you use third-party sites, you do so solely at your own risk. Links do not imply that CMINE is affiliated or associated with any linked site.
- (b) Use of CMINE Names. Except as specifically permitted by these Terms of Use, you may not use or register any name, logo or insignia of CMINE or any of its schools or subdivisions for any purpose except with our prior written approval and in accordance with any restrictions required by CMINE.
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Annex 14 – CMINE Privacy Policy

Crisis Management Innovation Network Europe (CMINE) – Privacy Policy - Users

This Privacy Policy is made by ARTTIC S.A.S., a legal entity having its registered office at 58A, Rue du Dessous des Berges. Paris 75013 and registered with the Court of Registry Paris B 344 112 396 (1999 B 14233) under the number FR53344112396 (hereafter, the “**Company**”). It is effective on 11 June 2019.

On behalf of the DRIVER+ project the Company provides a Crisis Management Innovation Network Europe (CMINE) platform (hereafter, the “**Platform**”) to registered users and as such have a user account (hereafter, the “**Users**”). The Platform is available at the following url address www.cmene.eu

The Company uses a customisable networking platform called “Hivebrite”, which enables the import and export of user lists and data, the management of content and events, the organization of emailing campaigns, the sharing of opportunity research as well as the management of funds and contributions of any kind.

In this regard, as data controller, the Company pays particular attention to the respect of its Users privacy and personal data protection. The Company is committed to ensure the compliance of its data handling as data controller with the applicable provisions of the “*Loi n°78-17 dated January 6, 1978, relative à l’informatique, aux fichiers et aux libertés*” and the EU Regulation EU 2016/679 regarding data protection dated April 27, 2016.

In order to do so, the Company has put in place an appropriate privacy policy which guarantees an optimal level of protection of its Users’ data.

This privacy policy is intended for the Users of the Platform of the Company.

ARTICLE 1. COLLECTED PERSONAL DATA

1.1 When subscribing on the Platform

When registering to the Platform, the User is informed that his or her personal data is collected. They include

- Personal identification information (name, email, phone number, address, etc.);
- Information regarding professional background and expertise (university education, professional experiences and CV etc.).

The User commits himself or herself to only provide accurate, exhaustive, and regularly updated data regarding his or her identity and any information he or she posts on the Platform. Under no circumstances shall the Company be liable for any data that is illegal and contrary to public order provisions.

In case the User was not consenting to the collection of the above-mentioned data, he or she shall be informed that he or she cannot have access to the Platform.

1.2 During the use of the Platform

The User may validly publish, at his or her own initiative, any content on the Platform which shall be kept by the Company:

- for maintaining and advancing the community for the foreseen purposes.

The User commits himself or herself not to publish any content which contains, including but not limited to, any remarks/images/pictures, contrary to applicable laws and regulations, to public order and good morals, or affecting the rights of third parties, including but not limited to:

- Identity fraud of a third person;

- Remarks/publish pictures or images that are violent, defamatory, offensive, malicious, obscene, inciting to discrimination or hatred, racist, xenophobic, anti-Semitic, condoning or approving war crimes, inciting to committing a crime, offense, act of terrorism, or contrary to the security of minors;
- Counterfeiting the intellectual property rights of a third person;
- Commercial canvassing or elements that could be qualified as unfair competition.

In any event, Hivebrite shall not be liable for the content, accuracy, or up-to-date state of the information freely published by the User.

The User consents that, following the publication of the content, the information he or she provides will become public on the Platform and that as such, same information will be published, modified, translated, reproduced in any form and accessible, saved and reproduced by other Users and the Company.

In most cases, Users post contents without previous moderation from the Company. The Company does not alter the content or information provided by the User, except under exceptional circumstances. The Company reserves its right to freely delete or amend the content or information of the User, without prejudice to the Users.

If some content posted on the Platform was to contravene the present privacy policy, applicable laws or the rights of third parties, any person can alert the Company of the existence of such Content at the following address: <mailto:cmine-helpdesk@projectdriver.eu>.

The User is informed that the Company does not collect any particularly sensitive data as defined by applicable laws and regulations.

1.3 Cookie data

The Company informs the User that Hivebrite, as well as its subcontractors, uses a tracking technology on its terminal such as cookies whenever the User navigates on the Platform.

A cookie is a message that, subject to the User settings, is sent to its terminal when the User navigates on a website. The aim is to collect data regarding the internet navigation of the User to send tailor-made services to its terminal (computer, mobile phone or tablet).

The cookies that are sent to the User's terminal are detailed under Article 2 of the present privacy policy.

The purpose of the process of the data collected through the cookies and the settings of such processing is detailed under article 9 of the present privacy policy.

ARTICLE 2. THE PURPOSE OF THE DATA PROCESSING

The Company and its subcontractors collect, process and host personal data that are freely transferred by the User when accessing the services proposed by the Platform.

Collected Data	Purpose of the processing
<p>When subscribing on the Platform:</p> <ul style="list-style-type: none">• Personal identification information (name, email, phone number, address, etc.);• Information regarding professional background and expertise (university	<ul style="list-style-type: none">• Access to the Platform;• Creation of a user account;• Access for the User to all functionalities of the Platform;• Management of requests to access, amend, delete, limit and oppose.

education, professional experiences and CV etc.).	
<p>When using the Platform:</p> <ul style="list-style-type: none"> Content and contributions to the community; 	<ul style="list-style-type: none"> The use and feeding of the Platform; Sending invitations for events organized by the Company or other Users, if the User has accepted to receive such invitations; Sending offers from the Company or its partners if the User has accepted to receive such offers.
<p>Cookies, trackers:</p> <ul style="list-style-type: none"> Add to calendar Keep active session The user/admin ID User first connexion Identify the user session Admin ID User search Google analytics #1, #2, #3. Linkedin 	<ul style="list-style-type: none"> Improve the quality of the services proposed by the Platform; Improve the usage functionalities of the Platform; Create statistics regarding the effective use of the Platform; Enable the User not to have to reconnect to the Platform for every new navigation on the Platform; Invite the User to events organized by the Platform; Create statistics regarding the different levels of activity on the Platform. The cookies cannot allow to identify the User; Enable the synchronization of the User's LinkedIn profile; Manage banking transactions.

The Company collects and processes the User's personal data for the sole purpose that the platform can be optimally set up and used. **USER'S CONSENT TO THE COLLECTION OF DATA**

The Company informs the User that no personal data as defined by applicable laws and regulations shall be collected without the prior explicit consent of the User.

The User expresses his or her consent upon when registering to the Platform, and after consulting this privacy policy.

The Company and its subcontractors commit themselves to a lawful and fair collection of the User's data, in full transparency and in compliance with the rights conferred to the User pursuant to applicable laws and regulations.

ARTICLE 3. LENGTH OF DATA RETENTION

The Company informs the User that the data is retained only during the length of the User's registration to the Platform.

If the registration is terminated n, the data collected for the registration as well as the content published by the User on the Platform shall be deleted after a period of 3 months.

In accordance with applicable laws, cookie data will be automatically deleted thirteen (13) months following their placing on the User's terminal.

Finally, the data regarding the identification of the Users in case of exercise of their rights pursuant to Article 6 of the present privacy policy shall be retained for (i) one (1) year in case of exercise of their access or rectification rights and (ii) three (3) years in case of exercise of their opposition right.

ARTICLE 4. OBLIGATIONS OF THE COMPANY

As data controller and in accordance with applicable laws and regulations, the Company commits itself to:

- Only collect the Users' data for the strict purpose as described under article 2 of the present privacy policy;
- Keep a processing register;
- Put in place all necessary technical and organizational appropriate measures in order to ensure the security, confidentiality, integrity, availability and the resilience of the process systems and services;
- Limit the access to the Users' data to the persons duly authorized to this effect;
- Increase awareness and train staff members regarding the processing of personal data;
- Guarantee to the Users their rights regarding the access, portability, erasure, rectification and opposition in relation to the collection and processing of their data;
- Notify the competent supervisory authority of any security breach presenting a serious risk regarding the rights and liberties of the Users within 72 hours of the occurrence of such a breach;
- proceed with the deletion of the Users' data in the event of an absence of any contact with the Company for a period of three (3) years;
- Only subcontract the processing of the Users' data to Hivebrite which, as subcontractor, has put all necessary technical and organizational measures in order to guarantee the security, confidentiality, integrity, availability and resilience of the processing systems and services.

For any additional information on Hivebrite, you can consult the webpage available at the following address: www.hivebrite.com.

ARTICLE 5. EXERCISE OF THE USERS' RIGHTS

The User is duly informed of his or her rights to access, copy, rectify, oppose, limit and delete his or her data at any time, i.e. prior to, during or following the processing of data

The User can exercise his or her rights by sending an email to <mailto:cmine-helpdesk@projectdriver.eu> or by mail to ARTTIC S.A.S (Project DRIVER +) 58A, Rue du Dessous des Berges, Paris 75013, France providing that the User justifies his or her identity.

In addition, in the event the User considers that his or her rights have not been respected, the User whose personal data has been collected can file a complaint with the competent supervisory authority (see competent authorities' websites for any additional information).

The list of competent supervisory authorities can be found here:

http://ec.europa.eu/justice/article-29/structure/data-protection-authorities/index_en.htm.

ARTICLE 6. HOSTING OF THE USERS' PERSONAL DATA

The personal data collected by the Company is hosted by the following service providers:

Host	Nature of the hosting
Microsoft Azure Cloud	Hosting of all data and content produced / provided by the User, as well as images, profile pictures and backups
Privacy policy:	

https://www.microsoft.com/en-us/TrustCenter/Privacy/gdpr/default.aspx	
<p>AmazonAWS</p> <p>Privacy policy:</p> <p>https://aws.amazon.com/compliance/gdpr-center/</p>	

ARTICLE 7. DATA BREACH

In case of breach of its systems, or theft, deletion, loss, alteration, disclosure, unauthorized access, or any other malicious act which would present a serious risk for the USERS' rights and freedoms, the Company commits itself to notify the Users, within a period of seventy two (72) hours following the occurrence of the breach, of (i) the nature of the breach, (ii) the probable consequences of the malicious act, (iii) the appropriate measures proposed to remedy the malicious act.

The malicious act presenting a serious risk regarding the rights and freedoms of the Users shall be notified to the competent supervisory authority.

The User is duly informed that the Company shall not be liable in case of breach of IT security which can cause damages to computer equipment, as well as in case of breach or malicious act by a third party targeting the system or the Platform.

ARTICLE 8. COOKIE MANAGEMENT CONFIGURATION AND OTHER DATA

The User's consent is requested through a banner at the bottom of the Platform homepage.

When receiving the User's consent, the User's internet navigator shall automatically transmit to the Company the data collected and detailed under Article 1.2.

The User is informed that the cookies and trackers will be automatically deleted after a period of thirteen (13) months.

The User may at all times configure its navigator in order to prevent the creation of cookie files.

However, certain functionalities of the services proposed by the Platform may not function properly without cookies. In addition, even if most navigators are configured by default and accept the creation of cookie files, the User has the possibility to choose to accept the creation of all cookies other than the functional cookies or to systematically decline them or to choose the cookies it accepts depending on the issuer by configuring the following settings:

- Internet Explorer:
 - Click on the settings menu, followed by "Internet Options";
 - Under the "General" tab on the upper-left hand side, scroll down to "Browsing history";
 - Check the "Temporary Internet files and website files," "Cookies and website data," "History," and "Download History" boxes;
 - Click on "Delete";
 - Close out of Internet Explorer and reopen it for changes to take effect.

- Firefox:
 - Click on your Tools bar;
 - Click on “Preferences”;
 - On the menu to the right, select "Privacy";
 - Under the “history option”, there is a shortcut titled "clear your recent history", click on that;
 - Select only the top four options and hit clear now.
- Safari:
 - Click on “Safari” in the top left corner of the finer bar;
 - Click on “Preferences”;
 - Click on the “Privacy” tab;
 - Click on “Manage Website Data”;
 - Click on “Remove All”;
 - Click “Remove Now”.
- Google Chrome:
 - Click the Tools menu;
 - Click on “More tools”;
 - Clear browsing data;
 - At the top, choose a time range.
 - To delete everything, select “All time”;
 - Next to "Cookies and other site data" and "Cached images and files", check the boxes;
 - Click on “Clear data”.

In order to configure the data settings, please find below the recommendations of the Company:

Data collected for the following purposes:	Settings
General data enabling the proper functioning of the Platform and the improvement of the services proposed by the Platform.	Data that is essential for the provision of services by the Company, non-configurable.
Data regarding the management of payment services proposed by the Platform, delinquencies and litigation.	Data that is essential for the provision of services by the Company, non-configurable.
Data enabling the creation of User files; Mailing of commercial offers, advertisements or newsletters of the Company and/or its commercial partners if this has been accepted by the User.	Management by the User in its login area; Unsubscribing to newsletters / commercial offers by clicking on the appropriate link; Request for deletion of the data base of the Company by writing to mailto:cmine-helpdesk@projectdriver.eu and subject to providing a proof of identity.
Compilation of statistics with the purpose of improving the functioning of the Platform notably by analysing the traffic of the Platform (modules which are more or less consulted, preferred routes, level of activity depending on the day of the week et hour of the day, etc.) and by adapting the Platform according to the needs and tastes of the Users	Clearance of cookie history in the navigator pursuant to the above instructions; Using the “incognito mode” whilst navigating; Request for deletion of the data base of the Company by writing to mailto:cmine-helpdesk@projectdriver.eu and subject to providing a proof of identity.

(recognition of the User when it accesses the Platform).	
Management of requests to access, rectify, delete, limit and oppose.	Request for deletion of the data base of the Company by writing to mailto:cmine-helpdesk@projectdriver.eu and subject to providing a proof of identity.

ARTICLE 9. PERSONS AUTHORIZED TO ACCESS THE USERS' DATA

The data of the Users is accessible only by duly authorised persons for administrative or maintenance purposes regarding the Platform with the exclusion of any commercial use, and if applicable, in order to enforce the rights exercised by the Users regarding their data (in particular the right to access, rectify, oppose, port and to be forgotten).

The Company informs the User that, apart from hosting and payment services, it uses the following subcontractor:

- The company KIT UNITED for its HIVEBRITE solution, a French *société par actions simplifiée* with a capital of 284.280,00 Euros, registered with the Paris Companies register under the number 75339171300017, having its registered office at 8, rue de la Grande Chaumière, 75008 – Paris.

Especially in light of any future developments of the applicable laws and regulations, the Company reserves its right to proceed with any modification of its privacy policy and commits itself to duly inform Users about such modifications.

Annex 15 – Preliminary list of identified CM networks, organisations and projects

WILDFIRES	Expert Group on Forest Fires	http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=416
WILDFIRES	FIRE-IN	https://cordis.europa.eu/project/rcn/209950/factsheet/en
WILDFIRES	FEU	https://f-e-u.org/index.php
WILDFIRES	FNSPF - French Fireman	https://www.pompiers.fr/federation-nationale-des-sapeurs-pompiers-de-france
WILDFIRES	CFOA	https://www.cfoa.net/
WILDFIRES	CTIF	https://www.ctif.org/
WILDFIRES	EUSTAFOR (Forest)	https://eustafor.eu/
WILDFIRES	Eurosprinkler	https://www.eurosprinkler.org/
WILDFIRES	EFISA - European Fire Safety Alliance	https://www.europeanfiresafetyalliance.org/network/
WILDFIRES	CFPA Europe	http://cfpa-e.eu/
WILDFIRES	CFPA Europe	http://cfpa-e.eu/
WILDFIRES	Fire Safe Europe	https://firesafeeurope.eu/
WILDFIRES	European Fire Academy	http://europeanfireacademy.com/
WILDFIRES	European Fire Academy	http://europeanfireacademy.com/
WILDFIRES	The Global Fire Monitoring Center - GFMC	http://gfmc.online/
WILDFIRES	MEFISTO	https://www.mefistoforestfires.eu/content/euforfire-network
WILDFIRES	EFFUA	http://www.effua.org/
WILDFIRES	EFSG	https://www.efsg.org/
WILDFIRES	PAU COSTA Foundation	http://www.paucostafoundation.org/
VOLUNTEER MANAGEMENT	PEN-CP	https://www.pen-cp.net/
CBRN	e-NOTICE	https://www.h2020-enotice.eu/
CBRN	ENCIRCLE	http://encircle-cbrn.eu/encircle/
VOLUNTEER MANAGEMENT	EFRIM	https://efrim.org/
VOLUNTEER MANAGEMENT	TIEMS	http://www.tiems.info/
VOLUNTEER MANAGEMENT	PKAVS Third Sector Interface	info@thirdsectorpk.org.uk
VOLUNTEER MANAGEMENT	Association of Volunteer Managers	https://volunteermanagers.org.uk/tag/networking/
VOLUNTEER MANAGEMENT	Doing Good Leeds	https://doinggoodleeds.org.uk/volunteer-managers-network.html
VOLUNTEER MANAGEMENT	VOST Europe	http://www.visov.org/vost-europe/
FLOODS	DAREnet	http://darenetproject.eu/
FLOODS	ECRR	http://www.ecrr.org/
FLOODS	EEB	https://eeb.org/
FLOODS	STAR-FLOOD	http://www.starflood.eu/
Crisis management	MEDEA	https://www.medeia-project.eu
Crisis management	ARCSAR	http://arcsar.eu/
SECURITY	EXERTER	https://cordis.europa.eu/project/rcn/216153/factsheet/en
SECURITY	ILEAnet	https://www.ileanet.eu/
SECURITY	Europol	https://www.europol.europa.eu/
MEDICAL EMERGENCY	NO FEAR	http://no-fearproject.eu/
EMERGENCY SERVICES (112)	EENA	https://eena.org/
SECURITY	CENTRIC	https://research.shu.ac.uk/centric/
SECURITY	MediLabSecure	https://www.medilabsecure.com/project.html
SECURITY	SECTRANS NAS	https://www.sectrans-nas.eu/project-team/the-consortium/
SECURITY	SECTRANS NAS	https://www.sectrans-nas.eu/project-team/the-consortium/
SECURITY	JCBRN Defence COE	https://www.jcbrncoe.cz/
SECURITY	ISEM Institute	https://www.isemi.sk/en_GB/o-nas/
SECURITY	ICI International CBRNE Institute	https://www.ici-belgium.be/

Annex 16 – Preliminary list of external media

Name of publication+B3:C41B3:C39C39B3B3:C40	Website
Ambulance News	https://www.ambulancenews.com/an/default.aspx
Ambulance Today	http://www.ambulancetoday.co.uk
Asia Pacific Fire Magazine	http://apfmag.mdmpublishing.com
Crisis Prevention	http://crisis-prevention.de/
Crisis Response Journal	http://www.crisis-response.com
DRMKC newsletter (JRC)	http://drmkc.jrc.ec.europa.eu/
Emergency Services Times	http://emergencyservicetimes.com
EU Horizon Magazine	http://horizon-magazine.eu/
EU research*eu focus	www.cordis.europa.eu/research-eu/research-focus_en.html
EU research*eu results magazine	www.cordis.europa.eu/research-eu/magazine_en.html
Euractiv	
European Data Quarterly (an open access journal)	http://dataquarterly.eu/
FIRE	https://www.fire-magazine.com/fire/default.aspx
Fire & Rescue/ Industrial Fire Journal	http://www.hemmingfire.com
Get resilient	http://www.getresilient.com
HR Grapevine	http://www.hrgrapevine.com/markets/hr
https://www.criticalcommunicationsreview.com	
IFRC Psychosocial Centre quarterly Magazine	http://pscentre.org/
International Association of Emergency Managers	http://www.iaem.com
International Firefighter Magazine	http://iffmag.mdmpublishing.com
International HR Advisor	http://www.internationalhradviser.com
International Journal of disaster Resilience in the	http://www.emeraldgroupublishing.com/ijdrbe.htm
International Journal of Emergency Management	http://www.inderscience.com/jhome.php?jcode=ijem
International Journal of Mass Emergencies and Dis	http://www.ijmed.org/
Journal of Contingencies and Crisis Management	http://interscience.wiley.com/jpages/09
Journal of Disaster Prevention and Management	http://www.emeraldgroupublishing.com/products/journals/journals.htm?id=dpm
Journal of International Organisation	http://journal-iostudies.org/
New Europe	https://www.neweurope.eu/
People Management	http://www.cipd.co.uk/pm/
Police Oracle	http://www.policeoracle.com
Politico	http://www.politico.eu/
PreventionWeb News	http://www.preventionweb.net/news/
Radio Resource Media Group	www.RRMediaGroup.com
Security Europe	http://www.securityeurope.info/
The Critical Communications Review	https://www.criticalcommunicationsreview.com
The European	http://www.magazine-the-european.com
TIEMS Newsletter	http://tiems.info/About-TIEMS/tiems-newsletter.html