

CALL FOR APPLICATIONS:

Submission documents



Driving Innovation in Crisis Management
for European Resilience



Are you **DRIVING INNOVATION** in Crisis Management? Are you developing and deploying **SOCIO-TECHNICAL SOLUTIONS** for first responders? Do you provide innovations being a **GAME CHANGER** for operational, tactical and strategic decision makers? We need you to share your innovations with the Crisis Management community! **DRIVER+** organises a series of trials which investigate innovative solutions under simulated crisis conditions. With this call for application, we invite you to participate to the second event.

DEADLINE FOR SUBMISSION: 26th of March 2018



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

Who are we?

In 2014, dedicated practitioners' organizations, research institutes, industries and SMEs teamed up to drive innovation in Crisis Management for European resilience.

By 2020, our goal is to valorise the wealth of European innovation and science in Crisis Management, by assessing and delivering solutions that can be used and combined to address different types of large-scale crises. Your participation in DRIVER+ activities is important to us and will help us to align with and to follow-up on relevant policies, challenges, gaps and community needs faced within the wide spectrum of thematic areas dealing with Crisis Management. To maximise the impact of European Research and Innovation in Crisis Management, and to ensure that our trials and events are conducted taking into account your expertise and the technological state-of-the-art, we warmly invite you to take part in our activities.

Within the project, we will conduct a series of trials which investigate innovative solutions under simulated crisis conditions. We invite selected submissions to this call for application to participate to one of these events. The next section will give insights on the setting for the trial you can apply to by this call.

Solutions - What are we looking for?

A solution is a building block that contributes to a crisis management function. Solutions can be technologies, tools, methods, concepts, or recommendations that regard potential technical, organizational, procedural, legal, policy, societal, or ethical improvements to the European Crisis Management legacy.

What's in it for you?

Participating in the DRIVER+ portfolio of solutions features great opportunity to spread out your product to the European Crisis Management community. Within the trials, you will be in contact with a large group of actors who are working and researching in the domain. Thereby, your solution gains visibility to a wide audience not only within DRIVER+ but also to other interested parties in and beyond Europe.

Participating in the trial will enable you to:

- get a better understanding of the needs of the crisis management practitioners,
- test the integration of your solution into a complete crisis management system, based on a scenario developed by experts,
- get first hand feedback from operational that have tested your solution in a controlled environment and scientifically sound setting,
- get new insights to advance in the development of your solution.

Trial Scenario

The trial objective is to improve cooperation and coordination between different organizations, or agencies within and across different countries using innovative solutions for large scale and complex (multi-event) crisis.

The scenario in development includes multiple incidents with cross-border dimension occurring on several sites.

The main event is a large forest fire, threatening wildland urban interfaces in a Mediterranean environment. The main mission objective is therefore to “suppress the fire”, in order to (according to the French doctrine),

- (1) protect people (this includes dealing with casualties),
- (2) protect goods and infrastructures, and
- (3) protect the environment.

A support from the EU Civil Protection Mechanism is requested.

Additional man-made and natural events will complete the scenario in order to increase the coordination needs and exchanges of information at horizontal level between agencies and countries, as well as vertical level along the command chain. These events will be defined at a later stage, to challenge the selected solutions.



Figure 1: Scenario Image 1 (source: 20 minutes)



Figure 2: Scenario Image 2 (source: Valabre)



Figure 3: Scenario Image 3 (source: Valabre)

Main issues to which solutions should contribute

We are especially looking for solutions addressing the following capability needs:

- Merging and synthesizing disparate data sources and models in real time (historic events, spreading models, tactical situation, critical assets map, etc.) to support incident commander decision making;
- Exchanging crisis-related information among agencies and organizations (also related to interoperability), including between fire-fighters and emergency medical services (when medical care is not provided by firefighters units);
- Ensuring a common understanding of the information exchanged (terminology, symbology) by all crisis managers involved in the response operations;
- Offering common doctrine or procedures supporting international cooperation in aerial firefighting
- Incorporating accurate and verified information from multiple and non-traditional sources (e.g. crowdsourcing and social media) into response operations;
- Overcoming the limited capacity to deal with large numbers of severely burned casualties at member state level (in particular by increasing coordination efficiency);
- Identifying the location of injured/trapped/deceased casualties in large forest fires.

Trial Setup and involved actors

Because of widespread effects of this kind of incidents and limited possibilities to conduct this kind of exercise in real-life conditions, the trial will be organised as a table-top exercise based on a simulated environment.

The scenario will require a commitment of stakeholders (end-users) from every crisis management level (local, regional, national and international) and from all the agencies participating in the crisis response in this specific scenario:

- Fire-fighters : from France, and (aerial) reinforcement from other countries, terrestrial units from other countries if there is a cross border aspect in the scenario
- Police (for urban areas) from France or also one other countries if there is a cross-border aspect
- Gendarmerie (for rural areas)
- Medical services organization
- Decision makers and authorities (for all countries involved in the scenario)

All levels of the command chain will be played from the field command post (with the Incident Commander role) up to the zonal and national operational centres, as well as the European Response Coordination Centre.

Actions will be taken by these stakeholders in realistic information environment, based on both legacy solutions for chosen country, crisis management plans, rescue procedures and good practices of participants; and selected innovative solutions.

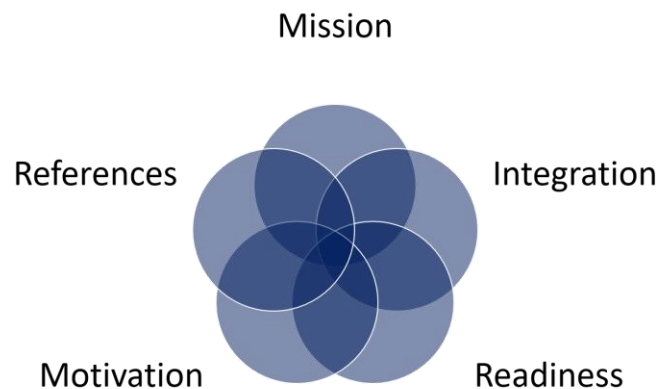
Further actors will be involved based on the scenario developments and the additional side events.

Application Steps

Step 1: Answer the evaluation criteria

Please give short and concrete answers to the following questions with regard to the above scenario description. Please do not discuss implementation details or any technical aspects, which are not defining the contribution. You will have the chance to address technical details in the next section. **[Up to 2000 characters (~300 words) each]**

Every submission should represent an independent solution. If you want to apply with a set tools, e.g. software programs, which only work together or gain additional value as a joint solution, please propose them in one submission to increase your chance of acceptance.



Mission

How does the solution contribute to crisis management?

Describe the objective you want to achieve with your solution and how this improves crisis management, e.g. by supporting tasks or improve communication/collaboration.

Integration

How is it integrated into the existing crisis management operations?

Describe to which aspects of crisis management your solution belongs to, e.g. the required outputs, results it produces and who is using it.

Readiness

How mature is the solution and has it been tested or proved?

Describe on which stage of development your solution is currently. You may refer to the stages of innovation or technology readiness level listed below.

Motivation

How does the solution address problems of practitioners?

Describe why you developed the solution and which needs are addressed in crisis management which are the main reasons for the solution.

References

Do references on the provider's experience and solution application exist?

Describe if the solution itself already has references for its application or if you as solution provider are knowledge in the field of crisis management, e.g. with other solutions.

Step 2: Provide additional details

Please give a short and concrete answer to the following questions. The answers provided here will not be evaluated in regard to a selection for the DRIVER+ trials but serve a better documentation of solutions. Provide attachments if needed.

[Up to 2000 characters (~300 words) each]

Resources

Which resources are needed to operate the solution?

Describe if your solution requires special resources to be used, e.g. infrastructure, additional hardware or software.

Know-How

Which expertise is needed to operate the solution?

Describe if your solution requires a certain domain knowledge or training of the users, e.g. minimum level of command or environment insights.

Platform

On which platforms is the solution available?

Describe on which kind of environment your solution is operated, e.g. the operating system of mobile and stationary devices or the organizational level in crisis management.

Technique	On which technique (or technology if applicable) is the solution based on?
<i>Describe the most important methodological background of the solution, e.g. communication forms or used technologies.</i>	
Investment	Which investments are necessary to deploy the solution?
<i>Describe the hardware and know-how to be acquired to set up and long term operate the solution.</i>	

Stage of Innovation	Technology Readiness Level
Stage 1: Concept	TRL 1: Basic principles observed and reported
Stage 2: Research and Development	TRL 2: Technology concept and/or application formulated
Stage 3: Initial Piloting	TRL 3: Analytical and experimental critical function and/or characteristic proof of concept
Stage 4: Early Adoption/Distribution	TRL 4: Component and/or breadboard validation in laboratory environment
Stage 5: Market Growth	TRL 5: Component and/or breadboard validation in relevant environment
Stage 6: Wide-scale Adoption	TRL 6: System/subsystem model or prototype demonstration in a relevant environment
	TRL 7: System prototype demonstration in an operational environment.
	TRL 8: Actual system completed and qualified through test and demonstration.
	TRL 9: Actual system proven through successful mission operations.

Step 3: Provide attachements (optional)

To support your answers in step 2 and 3 you can provide attachment in form of pictures and documentations. Please be aware that the attachements do not replace your answer and may only support explanations given above. All attachments need to be packed into one archive. (supported file format: .zip, maximum file size: 50MB)

Step 4: Submit application

Save the completed PDF form and upload it with attachments (if included) to the submission tool EasyChair following the link below.



Submission deadline: 26th of March 2018

Review Procedure

Every solution will be evaluated according to the above criteria – Mission, Integration, Readiness, Motivation and References – by at least three independent evaluators. The review results will be send to you by April, 27th 2018.

Contact

In case of questions or any other inquires to the call, please feel free to contact us at:

solutionselectiongroup@projectdriver.eu