

CALL FOR APPLICATIONS

DRIVER+ 4th Trial

Application process



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 third event.

DEADLINE FOR SUBMISSION: 29th of October 2018



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Before you start

Who are we?

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

By 2020, our goal is to valorise the wealth of European innovations 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 state-of-the-art solutions, 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. For now, imagine a Trial as a demonstration of the innovative capabilities of solutions in a fictive crisis scenario. 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+ project 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. Information on your solution will be taken up in our digital Portfolio of Solutions. 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,

- 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 experts that have tested your solution in a controlled environment and scientifically sound setting,
- Get new insights to advance in the development of your solution.

The Trial

Trial Scenario

The central area of Austria has been struck by a heavy earthquake and subsequent heavy rains.

The local region of Eisenerz (in Styria, Austria) is one of the most affected with missing persons, casualties, collapsed buildings, blocked roads, and endangered industries working with hazardous substances.

Inhabitants have left their houses being afraid of aftershocks and collapsing of buildings. They have to spend the next days outdoors due to the lack of temporary shelter and blocked roads.

Similarly, there is a disruption of lifelines such as water, food, shelter, transportation and medical care. Electricity and mobile networks are severely damaged.

All local and national emergency response organizations have been deployed on site (Austrian Red Cross, fire brigades, police and the army); however, due to the extension of the affected area and overwhelmed national response capacities, the union civil protection mechanism was activated. A request of international assistants was activated with regards to medical treatment, water purification as well as search and rescue.

Due to the difficulty to access the affected area and considering the impact of the disaster, there is an urgent need for humanitarian assistance and assessment.

A large amount of volunteers and rescue equipment is needed to deal with the increasing number of affected people i.e. search and rescue, shelter, medical care, water food and transportation.

Additionally, there is also an urgent need for the management of spontaneous volunteers.



Figure 1: Joint Forces in action

(Source: Österreichisches Rotes Kreuz / LV Vlbg
/MEDIArt /Andreas Uher)



Figure 2: Search and Rescue operations

(Source: Österreichisches Rotes Kreuz / LV Salzburg)

Main Issues

For main issues to which Solutions should contribute we are especially looking for Solutions addressing one or more of the following capability needs:

Real-time data and information fusion to support incident commander decision-making: ability to merge and synthesise disparate data sources and models in real time (e.g. visualisation of resources, spreading models, tactical situation, critical assets map, damaged objects/infrastructure etc.) to support incident commander decision making and exchanging crisis-related information among agencies.

Volunteer Management: in the sense of management of spontaneous as well as affiliated volunteers on the crises scene in terms of location, tasking, capabilities and duration of operations.

Incorporating information from multiple and non-traditional sources: Reporting of dangerous areas and situation overview from multiple and non-traditional sources (e.g. crowdsourcing and social media) into response operations.

Psychosocial support: Having the capability to measure stress and/or improving the communication and the awareness of psychological stress of those affected, especially spontaneous and affiliated volunteers.

Interaction with the population: as including e.g. 1). Micro-learning capabilities to communicate to the population safety information and recommendations what they can do during a crisis. 2). Registration of affected people. 3). Delivering information from the public to the emergency management authorities.

Evaluation: crisis management evaluation methodology/tools for performance assessment and how to learn from self-experience.

Trial Setup and Involved Actors

The Trial will be organized as a multi-day field exercise under the framework (and in parallel) of a Large Scale European Civil Protection exercise. National emergency organizations will be present with their volunteers and experts while making use of equipment, vehicles and tools in simulated disaster scenarios.

The scenario will require a commitment of stakeholders from different crisis management levels and from all the agencies participating in the response:

- Austrian Red Cross
- Austrian Fire Brigades
- Police
- Army
- Decision makers and authorities

Other emergency response organizations from neighbouring countries are expected to participate following the procedures from the union civil protection mechanism (UCPM). The exercise will also serve as testing environment for introduction and establishment of standard operating procedures (SOPs), standards and concepts, of the UCPM within central European region.

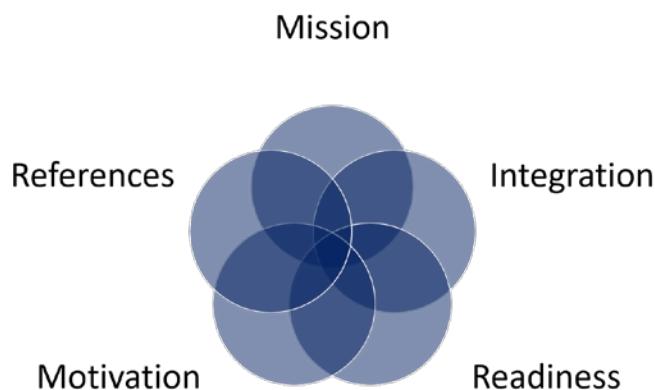
Actions will be taken by the stakeholders in a realistic information environment, based on currently available means, crisis management plans, rescue procedures and good practices of participants.

Application Steps

Step 1: Answer the evaluation criteria

Please give short and concrete answers to the following questions. Make reference to the above scenario where possible. 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] [Please download the PDF and use the Adobe PDF Reader or Adobe PDF Pro to avoid compatibility issues with some browser PDF viewers.]

Every submission should represent an independent solution. If you want to apply with a set of 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?
<p><i>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.</i></p>	

Integration	How is it integrated into the existing crisis management operations?
<p><i>Describe to which aspects of crisis management your solution belongs to, e.g. the required outputs, results it produces and who is using it.</i></p>	
Readiness	How mature is the solution and has it been tested or proved?
<p><i>Describe on which stage of development your solution is currently. You may refer to the stages of innovation or technology readiness level listed in Table 1 of the document.</i></p>	

Motivation	How does the solution address problems of practitioners?
<p><i>Describe why you developed the solution and which needs are addressed in crisis management.</i></p>	
References	Do you have references on your experience and solution application?
<p><i>Describe if the solution itself already has references for its application or if you as solution provider have experience in the field of crisis management, e.g. with other solutions.</i></p>	

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.

Table 1: Stages of innovation or technology readiness level

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?
<p><i>Describe if your solution requires special resources to be used, e.g. infrastructure, additional hardware or software, dedicated training, specific knowledge.</i></p>	
Know-How	Which expertise is needed to operate the solution?
<p><i>Describe if your solution requires a certain domain knowledge or training of the users, e.g. minimum level of command or environment insights.</i></p>	

Platform	On which platforms is the solution available?
<p><i>In case the solution is IT-based, describe in 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.</i></p>	
Technique	On which technique (or technology if applicable) is the solution based on?
<p><i>Describe the most important methodological background of the solution, e.g. communication forms or used technologies.</i></p>	

Investment	Which investments are necessary to deploy the solution?
<p><i>Describe the hardware and know-how to be acquired to set up and long term operate the solution.</i></p>	

Step 3: Provide attachments (optional)

To support your answers in steps 1 and 2 you can provide attachments in form of pictures and documentations. Please be aware that the attachments 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.

Submit Application

Submission deadline: 29th of October 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 with an end-user background. The review results will be send to you by 17th of January, 2019. Solutions pre-selected by the practitioners and Trial owner will be invited to a demonstration event.

Trial process

If your solution passes the open Call for Application, you will be invited to a demonstration event in Vienna, Austria, to showcase your solution to the Trial committee and respond to questions. The Solutions demonstration will take place in the period of 11.-15.2.2019. Participation and physical presence is mandatory. In special cases a remote demonstration may be allowed by the Trial committee. Travel costs for your participation are reimbursed by the DRIVER+ project.

If your solution is finally selected after this demonstration event, you become member of the Trial team. Starting from the demonstration event, your participation in the project and physical presence to multiple meetings is mandatory. Please reserve the following dates:

Event	Duration	Date	Location
Solution demonstration	1 day	11.-15.02.2019	Vienna, Austria
TIM-Technical Integration Meeting	3-5 days	11.-15.03.2019	
Trial Dry-run 1	3-5 days	13.-17.5.2019	Vienna or Styria, Austria
Trial Dry-run 2	3-5 days	19.-23.8.2019	Eisenerz, Styria and others*)
Trial	5 days	18.-22.9.2019	

*) others: means other places in Styria

Please make yourself familiar with the overview of the process ahead. To read the additional information on the DRIVER+ Trial process and possibilities for cost reimbursement, [please visit website \(click here\)](#) and go to the Trial Process Overview next to the submission form.

Contact

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

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