

**DRIVER+ project (Driving Innovation in Crisis Management for European Resilience) reports on helping European Crisis Management practitioners improve their capability development and innovation management**

# Resilience through innovation: the European dimension

**W**hen a disaster strikes and several countries are affected, how can practitioners coordinate and ensure they have the means to assist the affected areas? Disasters are unpredictable and the more connected our societies become the greater the disruptive potential of events like floods, wildfires, earthquakes, industrial accidents and terrorist attacks. This is why resilience and innovation go hand in hand when it comes to responding to natural and man-made disasters.

The DRIVER+ project (Driving Innovation in Crisis Management for European Resilience) was set up precisely with the purpose of helping European Crisis Management practitioners improve their capability development and innovation management. To achieve its goals, this European project (financed under the EU's Seventh Framework Programme) creates an environment for practitioners to assess what specific gaps and challenges they face and the solutions that are available that will help them to manage things in a better or novel way. DRIVER+ can assist by evaluating a range of innovative solutions in simulated contexts. This will allow them to understand what new socio-technological innovations and solutions will best meet their needs when responding to current and emerging disasters.

Practitioners have been involved with DRIVER+ from the very beginning. The practitioners identified a series of capability gaps they need to address. Based on these gaps, four trials were designed. For each trial, a call for applications is opened targeting solution providers. After careful review, a number of solutions are invited to



Delegates visiting some of the solution providers during I4CM

demonstrate how they address the gaps presented by the practitioners. Selected solutions then undergo one of the project's four trials, during which practitioners evaluate the effectiveness of the solutions in conditions that simulate a specific crisis situation.

## **Trial-driven Approach to Innovation**

The first Trial of the DRIVER+ project was held in Poland in May 2018 and simulated a chemical spill affecting two countries. Three solutions were assessed – one which created a common operational picture allowing practitioners to coordinate in a cross-border environment; another which simulated the dynamics of a flood in relation to the affected area; and another which used cloud computing to quickly create a geometrically correct 3D image of an affected area using a drone.

The second trial will take place in France this month and will use the scenario of a large forest fire in a cross-border Mediterranean environment, which also threatens nearby urban locations. Its general purpose will be to improve cooperation and coordination between agencies of different countries. Practitioners will be able to evaluate how the four selected solutions address their gaps related to short-comings in the exchange of information between agencies, limits in ensuring a common understanding of the information exchanged and insufficiency in incorporating accurate and verified information from non-traditional sources (such as social media and crowd-sourcing) into rescue operations.

The solutions assessed in every trial will be integrated into an online Portfolio of Solutions (PoS), to be launched soon, and which will later on be open to any solution provider that can address the reported gaps. The trials take place in both a physical and a virtual environment and are supported by the DRIVER+ Test-bed, which consists of the software and methodology that creates an environment for systematically trialling the solutions.

## **Innovation for Crisis Management (I4CM) in Warsaw**

Before the second trial, the DRIVER+ project underwent another major milestone with the third edition of its Innovation for Crisis Management event (I4CM). This

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Jan Kuipers, senior fire officer, The Netherlands



**Patricia Compard (second left), Chair of Societal and Citizen Security at the European Committee for Standardisation**

edition of I4CM was held in Warsaw on September 3-4, 2018, and its purpose was to provide a platform for policy-makers, practitioners, experts, researchers and industry to meet, exchange practices and establish synergies.

The third edition of I4CM was dedicated to the topics of inter-agency and cross border cooperation processes and instruments, challenges and obstacles in sharing and coordinating information during multi-agency disaster and on the importance of standards in crisis management.

I4CM consisted of a number of panel discussions and interactive workshop sessions. On the first day three panels were held, led by three different organisations: iTTI, a Polish IT consultancy; Public Safety Communications Europe, a forum that gathers practitioners, industry and researchers; and DIN, the German Institute of Standardisation. During the three panels, expert speakers from the European Commission, the UN, public safety services and industry gave their views on the state of the art of innovation for crisis management in Europe and demonstrated examples of how to approach challenges in crisis management in new ways, thanks to socio-technological innovation, new ways of thinking and how standards can contribute to assist practitioners.

Jan Kuipers, senior fire officer at the Safety Region of Haaglanden (the Netherlands), illustrated the importance of inter-agency cooperation with an example of his own experience as a practitioner, pointing out that in his geographical area “all information is available in real time for all users, including the regional and national centres,” stressing that it is not just the technology that matters but it is “the culture” that is fundamental, “that partners are willing to share information.”

#### **I4CM Panel Discussions and Workshops**

Indeed, one of the most relevant points raised in I4CM stressed the importance of a culture of information sharing and the social dimension of crisis management. DRIVER+ takes this into account by not just looking at only technological innovations and to explicitly address how we can learn from each other’s experiences. “Technology will give us interoperability but we need more. It’s easier if everyone is using the same system but willingness is

the zero phase,” as was put by Sanja Holen, Chair of the Technical Validation Committee of BroadWay, a project aiming to create a pan-European broadband mobile system for public protection and disaster relief. Stefan Tangen, of the Swedish Civil Contingencies Agency, added an international dimension to the discussion with the example of the International Forum to Advance First Responder Innovation and its work in identifying gaps on both sides of the Atlantic.

In this regard, it is important to look at what is being done around the world. “We have an example of a standard developed by our Indonesian colleagues regarding landslides. This spread across the world,” said Rainer Koch, Deputy Head of the Institute for Firefighting and Rescue Technology of the Dortmund Fire Department (Germany), while Patricia Compard, Chair of Societal and Citizen Security at the European Committee for Standardisation, stressed the importance of standards as “some of the most powerful tools we can have” in achieving things like “a common language, harmonised processes, trust, and compatibility.”

The interactive nature of I4CM meant that the event was a lot more than just a conference. This included workshops, presentations on the Trials of the DRIVER+ project and spaces where participants could come into contact with solution providers and other research projects and to get acquainted with the PoS and the Test-bed, allowing for a hands-on and interactive approach.

Thanks to its high number of participants from all around Europe, representing different sectors within the crisis management world, the latest edition of I4CM was a big success contributing to the DRIVER+ continuous learning process, where every event adds up to the knowledge that carries into the next.

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