DRIVER+ TRIALS

INSIGHTS AND FINDINGS SO FAR

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Driving Innovation in Crisis Management for European Resilience

DRIVER+ has conducted four Trials so far: in May 2018, three innovative technical solutions were trialled in the context of a toxic spill scenario in Warsaw, Poland. Trial - France, organised in October 2018 in Aix-en-Provence, trialled four solutions, focussing on the scenario of a large forest fire in southern France, which threatened a campsite, nearby towns and an industrial chemical plant. Trial - Netherlands in May 2019 was based on a flood scenario: severe weather had caused the Scheveningen lock to fail, flooding The Hague city centre, putting more than 500,000 people at risk. A total of six solutions were trialled on this occasion. Finally, five solutions were assessed in September 2019 in a scenario involving a heavy earthquake and subsequent heavy rains in the central area of Austria.

All DRIVER+ Trials have been developed and evaluated using the DRIVER+ Trial Guidance Methodology (TGM). The TGM gives very practical, concrete, yet systematic and robust, support to help clearly identify the Crisis Management gaps and formulate the questions the practitioners want to address, the performance indicators needed to support proper evaluation, the guidelines to develop a realistic scenario, and the tools to create this realistic environment and support the assessment.

What have these Trials shown about the use of innovative socio-technical solutions in European Crisis Management? Have the solutions proved to be useful?

The following findings are based mainly on the evaluation of Trials 1 and 2 in Poland and France. Both events together involved around 40 practitioners from 13 EU countries and trialled seven different solutions.

Improved coordination and sharing of information

Both Trial - Poland and Trial - France have shown the value of investing in solutions that improve the Common Operational Picture (COP) during an incident and lead to a more effective communication, both horizontally and vertically across the chain of command.

Improved horizontal communication is important especially during cross-border interventions and is likely to positively influence neighbours' support to a country affected by a disaster. Horizontal communication can also affect the cross-sector level: sharing a common information space between, for example, firefighters and Emergency Medical Services (EMS) allows a situation to be better assessed, both concerning crisis dynamics (for example fire contour visible for the EMS) and the dispatching of resources (ambulances visible to the fire service incident commanders).

Improved vertical communication between hierarchical levels, on the other hand, facilitates the assessment of operational needs and gaps, which supports, for example, the formulation of a precise Request for Assistance under the Union Civil Protection Mechanism. It also promotes the participation of local and regional level authorities in the formulation of such requests.

Enhanced accuracy of information

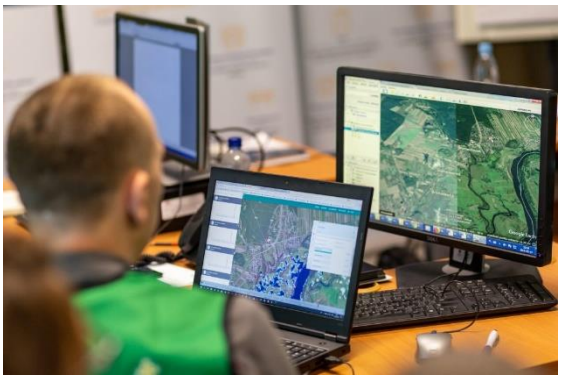
The use of dynamic modelling, for example for flood simulation, has proved to enhance the precision of emergency planning (risk management related to floods and to critical infrastructure). It also eases forecasting impacts during the response phase.

New types of information

The use of drones, for example for orthophoto map generation and 3D modelling, has been shown to be of considerable operational support and can be useful for the European Emergency Response Capacity assets (modules/teams) which have "searching competence". Aerial observation and mapping also makes post-disaster needs' assessment easier, especially in the case of major disasters affecting a large area.

Selection and prioritising of information

Dynamic modelling solutions are a potential game-changer in the decision-making process, because they enable information to be limited and prioritised in relation to the time available for implementing certain response measures. This considerably speeds up the aerial assessment of damage and needs and, consequently, coordination and resource management. Time-saving effects have been observed in most processes, particularly at the alert step, for example when searching for victims.



In summary, the trialled solutions have demonstrated that they can support communication, coordination and resource management through better operational documentation quality, especially with respect to accuracy, completeness, reproducibility, composition and format of the information. Furthermore, solutions involving dynamic threat modelling and 3D mapping improve internal communication in the decision-making team as well as the accuracy and the duration of the decision-making process.

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