This document offers a condensed overview of the 2nd DRIVER+ Trial and its results.

The Context

From 22 to 25 October 2018, the second Trial organized as part of the DRIVER+ project took place in Aix-en-Provence, France, at the Entente Pour La Forêt Méditerranée (Valabre), a public Civil Protection organisation. This event involved XX practitioners from France and Italy with the purpose of demonstrating how to best support the cooperation and coordination between different organisations and agencies from different countries in a large-scale crisis situation.

The Trial

After an open selection process, four solutions were assessed in a simulation-based command post which focussed on the scenario of a large forest fire in southern France, threatening nearby towns and an industrial chemical plant. The solutions assessed were CrisisSuite (by Merlin, the Netherlands), MDAC2 (by MDA, Israel) SMAP (By Thales Communication Systems, France) and LifeX COP (by Frequentis, Austria).

With the DRIVER+ Test-bed a Common Information Space and a Common Simulation Space were created in which practitioners were able to trial the applicability and effectiveness of these solutions while responding to the fictional, yet realistic cross-border crisis.

As for all DRIVER+ Trials, Trial 2 has been developed and evaluated using the Trial Guidance Methodology (TGM) which supports crisis management practitioners in trialling new solutions. The TGM gives a very practical, concrete yet systematic and robust support in clearly identifying the gaps and formulating the questions the practitioners want to address, the performance indicators to support a proper evaluation, guidelines to develop a realistic scenario, and the tools to create this realistic environment and supporting the assessment.

The overall research question was broken down into several sub questions, and for each of these, two scenarios were developed: a) the baseline, in which the regular legacy systems are being used, and b) the innovation line, in which the new solutions are applied. In total 6 Trial sessions have been completed in which the solutions have been applied individually and combined.
TRIAL 2 In a Nutshell

The Results

Comparing the accomplishment of the tasks between both lines after each run, gives an indication about the potential value of each new socio-technical solution. It was demonstrated that time delays, sharing and quality (accuracy) of the information could be effectively improved by some of the trialled socio-technical solutions. Time-saving effects have been observed in most of the CM processes, particularly at the alert step, when it comes to localization of victims.

The sharing of a COP between the fire-fighters and the Emergency Medical Services (EMS) supported a better situation assessment both concerning the crisis dynamics (fire contour visible for the EMS) and the dispatch of means (ambulances visible for the fire-fighters chain of command). However, for such a socio-technical solution to completely pay off, a better understanding of the procedures and the organization culture is a prerequisite.

The retrieval of information from Twitter for response operations was assessed as well in the Trial. While the trialled solution proved its capability to share the selected information by displaying it in a COP (therefore providing visualization of the messages that are geo-referenced), such information was not considered useful by the incident commander. Therefore, before integrating this type of solutions into operational procedures, it is necessary to discuss with the practitioners the added value that this type of information could bring into operations management.

Recommendations

The outcomes of the Trial provide ground to formulate the following recommendations related to EU policies, regulations and mechanisms:

In summary, in the context of a cross-border major disaster, the cooperation and coordination between different organisations and agencies, the trialled solutions contribute in saving time on specific processes (in particular at the alert step), in improving the accuracy of some of the information exchanged (in particular locations) and as a consequence in reducing the requests for information coming from misunderstandings, which in turns contributes in saving time.

Finally, it is suggested that a method to evaluate interoperability and inter-organisation cooperation would be highly beneficial at European level, to provide a realistic picture of the current situation and to enable future evaluation of the added value of the European Union Civil Protection Mechanism.

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