

SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)  
Integrated Applications End-to-End Solutions (1)

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IN SEARCH OF STANDARD. OR ABOUT EFFECTIVE USE OF SPACE SOLUTIONS IN CIVIL  
PROTECTION AND HUMANITARIAN OPERATIONS**Abstract**

During large scale crisis the effective management of situation requires not only a mobilisation of necessary resources, but also an appropriate information to use them in an optimal manner. In that domain space solutions have a significant potential to offer, as vast amount of information becomes available already during initial phases of crisis. But the lack of standards to effectively share information results in situation where the capabilities of space applications are not fully realized.

This paper argues that the established standards for exchanging of geospatial information are a prerequisite for effective use of space solutions during crisis. Such standards will enable integration of technical solutions into existing operational civil protection procedures and practices of humanitarian operations. The paper presents a potential way forward to establish such standards and to gradually build user's trust and willingness to share information.

Four examples of operational cases are presented, where existence of such standards would result in clear benefits, increasing efficiency of crisis activities. Those cases cover:

- improved understanding of situation during early phase of the crisis, when international actors assess extent of a crisis and consider their involvement;
- increased efficiency of operations resulting from having access to information about changes of the overall situation during deployment;
- increased safety resulting from having immediate access to information about new emerging threats and risks;
- more informed strategic planning of longer-term activities, having access to situation forecasts.

The paper builds upon a series of analytical and experimental activities that enabled synthesis of views of space and civil protection communities. Analytical work was initiated by the workshop "Space for Civil Protection" organised by ESPI and supported by ESA IAP in 2011. It was continued during the Polish Presidency of the European Union, when issue of ensuring an effective flow of geospatial information during crisis situations was brought to the level of formal EU Council recommendations.

On the practical side, both technical solutions and the benefits of integrating them into civil protection structures were demonstrated during EU Carpathex 2011 field exercise and during the interactive simulation being part of the "Use of space applications in humanitarian operations" workshop in 2012, co-organised by the Crisis Information Centre SRC, the [Polish] High School of Fire Service, and the Secure World Foundation.

The use of potential future standards will be demonstrated during the international civil protection exercise in Poland in spring 2014.