



Workshop: Interoperability in Disaster Management

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The **Interoperability in Disaster Management Workshop** was held in the frame of the [AGSE 2012](#) Conference that took place from 16 – 20 July 2012 in Johor Bahru, Malaysia. It intended to identify suitable ways of working in disaster management, specifically with respect to types and characteristics of interoperability required in disaster response and in the transitions between different phases of operation in disaster management.

The Workshop started with a reflection by participants on their own experiences with interoperability. In a plenary session the issues that participants have encountered were discussed. They cover a wide variety of topics such as:

- The lack of accessible and available data in suitable formats and quality;
- Connectivity with others via networks and links;
- The necessity and availability of metadata catalogues for meaningful documentation;
- Availability of suitable resources and capabilities to interact with others;
- The necessity and use of Open standards;
- The need to address different languages and differences in meaning;
- Importance of and obstacles in collaboration and coordination with others;
- The availability of real-time data;
- The need to work with various Viewpoints and to embrace (cultural) differences.



Examples of emergency response situations, such as earthquakes, wildfires or flooding gathered from other sources, provided more insights on the technical, but even more so the non-technical issues of interoperability that those operating in disaster response situations face. General coordination issues in disaster response situations, Mapping, GIS, Satellite imagery and the role of Social Media were topics illustrated in more detail.

With these insights and their own experiences in mind, participants then worked in small groups to populate a framework that provides a structured analysis of the different types of technical and social interoperability needed for different kinds of user scenarios that involve spatial information and their applications. The scenarios offered thereby covered self-contained systems, 'Systems of Systems', Federations and ad-hoc collaboration in disasters.

This systematic approach revealed very different ways of working that are appropriate to the complexity of each of the user scenarios. It also showed that the interoperability required for working effectively in contexts of crisis and disaster events is characterized by factors that go far beyond the technical, standards-based interoperability alone such as collaboration, coordination, mindsets, cultural awareness and sensitivity, trust, diversity, leadership, etc.