

Making a Difference

Natural disasters cause massive disruption to societies and overburden national economic systems. However, Earth observation could contribute to providing better information about the risk and onset of disasters, including early warnings and disaster monitoring, thus helping to minimise the effects and avoid considerable losses of life and property.

Many international organisations are tackling this issue, including the Joint Board of Geospatial Information Societies (JB GIS) and the United Nations Office of Outer Space Affairs (UNOOSA) which is carrying out the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) programme. One of the outcomes of this effort was the booklet entitled *Geoinformation for Disaster and Risk Management – Examples and Best Practices*, which demonstrates how various aspects of geospatial technology can be integrated into risk and disaster management.

A follow-on publication demonstrating and evaluating the economic, humanitarian, operational and organisational benefits of applying geoinformation to disaster management would help to raise awareness in the political and programmatic environment and to set priorities in research and development. This is the goal of the ongoing project called VALID (The Value of Geo-Information for Disaster and Risk Management), which is expected to result in a differentiated, scientifically founded answer to the crucial question: 'What difference can geoinformation make?'

A two-fold approach is being followed in order to ensure a holistic view of the benefits of geoinformation for disaster management and best possible coverage of the disaster management cycle. In a socio-economic benefit analysis, the monetary aspects are addressed. In parallel, the 'tacit' knowledge and practical experience of the global stakeholder community is explored by way of a web-based survey.

Whereas the costs of any geoinformation product can be easily estimated, monetising its societal benefit within a Cost-Benefit Analysis is more complex. Therefore, a comprehensive literature review is to be carried out, resulting in a set of needs profiles addressing aspects of organisation, information and infrastructure. A comprehensive literature database has been set up.

First, a web-based poll was carried out on the UN-SPIDER Knowledge Portal (www.un-spider.org/publications/VALID). All stakeholders were asked to identify the 10 most important geodata products and systems on a longlist containing 51 items such as hazard-specific risk maps, vulnerability maps, damage assessment maps and monitoring systems. The resulting reference set (table 1) highlights the global community's concerns about flood, earthquake, drought, fire, and landslide hazards, as well as the importance of risk analysis and monitoring.

This reference set is currently being described in technical detail in cooperation with leading geosciences associations and will be soon disseminated to the global end-user community for a standardised benefit appraisal. It will be exciting to finally compare the results of this differentiated user appraisal with the outcome of the socio-economic analysis.

The overall results of VALID are scheduled to be published in booklet format in summer 2013.

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