

Ad hoc Committee on Risk and Disaster Management

1. Introduction;

Each year, disasters such as storms, floods, volcanoes and earthquakes, cause thousands of deaths and tremendous damage to property around the world, displacing tens of thousands of people from their homes and destroying their livelihoods. Many of these deaths and losses could be prevented if better information were available regarding the onset and course of such disasters.

Several technologies can help, such as meteorological and Earth observation satellites, communication satellites and satellite-based positioning technologies to offer the potential to contribute to improved prediction and monitoring of potential hazards, Risk mitigation and Disaster Management, which in turn would lead to sharp reductions in losses to life and property.

2. Mission of the Ad hoc Committee on Risk and Disaster Management;

Natural hazards, such as storms, droughts, volcanic eruptions, or earthquakes, need not spell disaster. A disaster occurs only if a community or population is exposed to the natural hazard and cannot cope with its effects. Heavy rain in the middle of an ocean will not cause a disaster, but the same heavy rainfall on a vulnerable population may result in landslides and a huge loss of life. A minor drought may cause a famine if a region’s agricultural production is highly stressed by civil war. A community that lacks an early warning system may sleep while volcanic ash clouds bear down upon them. Vulnerability is the potent additive that mixes with natural hazards to cause disasters.

A complete and effective early warning system comprises a chain of four elements, spanning knowledge of the risks faced through to preparedness to act on early warning. Failure in any one part can mean failure of the whole system.

Basic Elements of an Effective Early Warning System¹⁾

Prior knowledge of the risks faced by communities	Technical monitoring and warning service for these risks	Dissemination of understandable warnings to those at risk	Knowledge and preparedness to act
- Risks arise from both the hazards and the vulnerabilities that are present; what are the patterns and trends in these factors?	- Is there a sound scientific basis for predicting the risks faced? - Are the right things being monitored? Can accurate warnings be generated in timely fashion?	- Do the warnings get to those at risk? - Do people understand them? - Do they contain useful information that enables proper responses?	- Do communities understand their risks? - Do they respect the warning service? - Do they know how to react?

Good early warning systems have strong linkages between the four elements. The major players concerned with the different elements meet regularly to ensure they understand all of the other components and what other parties need from them. Risk scenarios are constructed and reviewed. Specific responsibilities throughout the chain are agreed and implemented. Past events are studied and improvements are made to the early warning system. Manuals and procedures are agreed and published. Communities are consulted and information is disseminated. Operational procedures such as evacuations are practiced and tested.

Behind all of these activities lies a solid base of political support, laws and regulations, institutional responsibility, and trained people. Early warning systems are established and supported as a matter of policy. Preparedness to respond is engrained in society.

There are several examples of failure in the past that during the hazards occurred and one of major aims of the Ad-Hoc Group is to ensure the political support to the disaster and risk management actions. The other aim is to link and create knowledge transfer between international geo-science bodies working on disaster and risk management at different technological backgrounds.

It should create a decision and decision support forum based on the knowledge and experience of related experts of the JBGIS members and gain through multi-dialog with other groups working on the similar topic and support the on-site working teams by recommendations and updated technologies. To be able to achieve this, the Ad hoc committee will work at two levels: Gi4DM and Ad hoc Committee Meetings

- **Gi4DM conferences**

The Committee will support the series of Gi4DM conferences as decided in the previous JBGIS Meetings and use the feedback for internal analysis and evaluations. The goal of Gi4DM will be to invoke discussions on important research and development issues, to bridge specialist from different areas and promote use of geospatial information in Risk and Disaster management. This forum should be organized by the members of JBGIS (on rotating manner) to ensure that all aspects of geospatial information and its use for risk and disaster management are well-covered by the different specialists.

1. Conference 2009: , Prague
2. Conference 2010: with UNOOSA, Vienna

- **Ad hoc Committee meetings**

Trough email exchange between the appointed experts from the JBGIS members the Ad hoc committee will decide on work plan for a period of two years. The ultimate goal of the Ad-hoc Committee will be a Declaration of the “JBGIS Common Communiqué on Disaster Management” at the occasion of the Centenary Celebration of ISPRS in Vienna in 4th of July 2010.

¹⁾ International Strategy for Disaster Reduction, Platform for the Promotion of Early Warning; <http://www.unisdr.org/>

- **Planned meetings:**

1. First formal meeting in Vienna during the UN COPUOS S&T Committee meeting (11-15 February 2009, Day to be defined) or at the Gi4DM conference in Prague (19-22 Jan 2009)
2. Second formal meeting (during the 6th International Symposium on Digital Earth " Digital Earth in Action ", 9-12 Sep 2009 or 24th International Cartography Conference (ICC2009), 15-21 Nov 2009),
3. Final Meeting at Vienna at the occasion of the Centenary Celebration of ISPRS in Vienna in 4th of July 2010 and the Gi4DM Conference.

- **Final Outcome**

As mentioned in the previous sections ultimate goal of the Ad-hoc Committee will be a Declaration of the "JBGIS Common Communiqué on Disaster Management". This should be result of the work of the committee after several meetings and the work to be done. This "Common Communiqué" should aim to inform and awake the decision makers on the results not to be prepared on a risk management in proper way and alternatively show with best practices collected by the JBGIS Members the potential possibilities how to overcome the huge problems.

This should also aim to assist governments, local authorities, and other stakeholders concerned with natural hazards in potentially vulnerable areas. Therefore the outcome can be divided in 3 different results;

1. The Final Comprehensive Result of the Committee with best practises divided in the different steps of the disaster reduction
2. The Executive summary of the recommendations.
3. The "JBGIS Common Communiqué on Disaster Management" to be released by a Press Conference at Vienna in July 2010 with a participation of all Presidents of the JBGIS Members in UN Bureau.

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01.09.2008