PPRD South Partner Countries and GISs for Civil Protection

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On the first day of the PPRD South Training Workshop on "Geographical Information Systems for civil protection" held in Rome on 9-12 March 2010, in order to touch base on the subject, participants were asked to provide a quick outlook on the state of the art at national level in the field of GIS for civil protection.

From the information provided by the participants it appears that most of the Civil Protection Authorities of the PPRD South countries are provided with GIS. Yet the majority of them use GIS mainly for managing assistance and only part of them have set up GIS for risk assessment.

This important information, which clearly illustrates the background of the "prevention and preparedness" component of the PPRD South Programme, is briefly summarised below for each of the Partner Countries participating to the workshop.

Albania

GIS development started in 2005 within the Municipality of Tirana under the aegis of the Ministry of Public Works. GIS is now available also to the National Civil Protection Authority in support of emergency management. The Government is currently committed to further develop the system based on a new territorial

data model. Exchanging data among national institutions concerned is considered mandatory, yet it is still to be further developed.

Algeria

GIS for Civil Protection is available either at national or at local level. The development of a national GIS started in 2001 through the establishment of the National Council for Geographic Information. The Algerian GIS is based on ESRI technology. It integrates satellite images thank to the cooperation with the National Centre for Remote Sensing. GIS is used for both emergency management and risk assessment.

Bosnia & Herzegovina

The national 112 system is under initial development. The country is just approaching GIS which is still not available and is planned to be incorporated in the 112 system.

Croatia

Two national GIS for emergency management are available. The CORDCOM system (at county level) allows mobilizing assistance to victims of small accidents within 15 minutes. The National Protection and Rescue Directorate GIS provides detailed pictures of areas affected by more complex emergencies and allows the organization of rescue and assistance operations. Both GIS are open to all bodies involved in emergency management, at national and local level.

Egypt

A GIS for emergency management is available to the Council of Ministers as the decision-making body in charge of managing emergencies after disasters. This GIS includes, in particular, maps of electric lines, pipelines and the sewage system in order to monitor the possible consequences of an accident and to plan action. GIS for emergency management is also used by the fireguards and police to deliver assistance and to track vehicles through integration of GPS technology.

Israel

GISs for emergency management are available at both national and local level. Different GISs are currently being combined into one national Government managed system – the Israel Survey System – containing 120

information layers provided by national sources. A national web based open "Geo-Portal" has been also developed and is close to be launched, thus allowing to overcome the constraint of national institutions developing their own GIS portal. The national "Geo-Portal" will also allow producing and analyzing risk scenarios in order to better prepare response initiatives.

Jordan

A GIS database is available in the operational room of the National Civil Defence. It includes official data provided by Ministries and maps produced by the Royal Geographical Institute. The GIS displays the location of the key infrastructures which may be affected by major disasters. The system allows to broadcast early warning, exchange information during emergency management and facilitate decision making during the delivery of assistance. A proper GIS needs to be developed for effective risk assessment.

Lebanon

GIS within Civil Defense is still in the very initial phase of development and is currently utilized to organize key information for risk assessment and emergency management (emergency stations, hospitals, roads and strategic infrastructures).

Montenegro

The future GIS managed within the 112 Centre by the Ministry of Interior – Sector for Emergency Management will be utilized for coordination purposes in emergency management and Civil Protection. Models of digital maps are under development and are expected to be finalized by 2012. The new GIS will be accessible to all Government authorities. In this phase, 2004 maps are utilized.

Morocco

The first GIS for Civil Protection was developed in the past 4 years in the framework of a project involving 5 pilot regions. This GIS, which is not based on ESRI technology, integrates also satellite images and contains a risk analysis module including different layers of information and a module for monitoring assistance operations, including vehicles tracking.

Occupied Palestine Territory

A GIS Department has been recently established within the Civil Defense. Training and tools were provided by the Ministry of the Interior. The available GIS tools are mostly based on ESRI technology. A newly completed pilot project based on GIS and GPS technologies allows to monitor and track the Civil Defense vehicles from the operational units for better coordination of assistance operations.

Turkey

After the disastrous 1999 earthquakes, a pilot GIS was launched in the North-West part of the country with the objective of mapping hazards and assessing the vulnerability of the area to natural disasters (i.e.: earthquakes, landslides and floods). GIS is currently under further development in compliance with the EC INSPIRE Directive, so as to build an advanced system for the organization and management of hazard information for the benefit of different agencies. Effective GIS development, though, requires that efforts are made so as to overcome the different views by decision-makers on the use of GIS for improved Disaster Risk Reduction, the lack of coordination and the restrictions to data sharing between the Government agencies and institutions concerned.

Tunisia

A GIS prototype, using also satellite images, was recently finalized to support the national emergency management. The system which was first established in the Ariana Governatorate is now being extended to the rest of the country.