



WORKSHOP  
ON THE ROLE TELECOMMUNICATIONS/ICT  
IN DISASTER MITIGATION  
28 MARCH 2007



- Session 2 : Perspectives on Challenges to Disaster Communications
- Topics : Country Presentation by Pakistan
- Speaker : **Mushtaq Ahmad Bhatti, Director Telecom Ministry of IT**

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### **Development of Disaster Management Framework to Mitigate the Affects of Disasters**

Asia Pacific Community has experienced some of the biggest disasters in the history. The two most recent disasters being Tsunami and 8/10 earthquake in Pakistan. Both the disasters have caused colossal damages during the incidence and its aftermath resulting in unprecedented loss of human life, properties and infrastructures in the most difficult terrains.

What's more specific about the earthquake in Pakistan was the loss of human life, large scale disabilities, fatal casualties, trauma situations and inaccessibility for relief operations. The situation was unmanageable due to non availability of access to data and complete collapse of administration as well as infrastructure.

Telecommunication infrastructure was severely damaged and telecommunication distribution network almost perished, creating difficulties for relief/ rescue operations. Non-availability of alternate communications means required in such situations made rescue/relief operations less effective. No data/information could be transported by the relief teams to the major medical centers at Islamabad and other major facilitation hubs. As per Federal Relief Commissioner 73338 were declared dead other sources claim that death toll could be as high as 150,000

Special Communication Organization (SCO) is responsible for provision of telecommunication services in the area of Azad Jammu and Kashmir whereas PTCL is the main service provider in the Hazara Division. Ministry of Information Technology promptly sought the assistance of International Telecommunication Union (ITU) and satellite phone providers M/s Thuraya. ITU sent 25 Inmarsat Terminal (capable of providing basic telecommunication services) and 40 Data terminal (to provide internet and telemedicine connectivity to the rescue teams operating in the affected areas) along with expert mission. Thuraya Phones were used to establish PCO in the affected areas.



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British Telecom provided assistance of 08 Very Small Aperture Terminals (VSAT) terminals which were used by SCO to restore telecommunication link in the much needed areas. However, all this assistance was tiny as compared to the requirement. At that time, the need was felt to have global frame work for the cooperation among the international community.

When disaster events occur, getting the best out of hi-tech systems and infrastructure requires all-level cooperation. Impacts can be reduced by preparing appropriate advance operational plans, establishing warning systems, training emergency response personnel, educating people, etc. Emergency warning systems and disaster relief need to use the telecommunication facilities in setting up warning systems. Interoperability and cooperation among agencies and teams are important.

The importance of cooperation between national and local governments for disaster relief can not be denied. ICT can develop the disaster relief telecommunication network systems that enable information transfer and help coordinate various activities. There is need to promote the cooperation among members for sharing information on regional and international level. Building disaster relief telecommunications system in each country and promoting human resource development through training to educate in case of the future warning and relief is essential.

Establishment of appropriate technical standards and recommendations for disaster early warning and relief system is key factor in the management of disasters. It may also be recognized that telecommunication systems must be accompanied by high level of community awareness.

Pakistan also presented a proposal before World Telecommunication Development Conference 2006 at Doha which was accepted and recognized as global initiative supported by APT member countries, USA Russia and European Union Countries. One of the objectives of the proposal was to provide assistance to the member countries for development of disaster Management framework.

Tempere Convention is a useful cooperative framework which was available for the countries for signature by all States which are members of the United Nations or of the International Telecommunication Union at the Intergovernmental Conference on



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Emergency Telecommunications in Tampere on 18 June 1998, and thereafter at the headquarters of the United Nations, New York, from 22 June 1998 to 21 June 2003.

A State Party requiring telecommunication assistance for disaster mitigation and relief may request such assistance from any other State Party, either directly or through the operational coordinator of this convention. If the request is made through the operational coordinator, the operational coordinator shall immediately disseminate this information to all other appropriate States Parties. If the request is made directly to another State Party, the requesting State Party shall inform the operational coordinator as soon as possible.

A State Party requesting telecommunication assistance specifies the scope and type of assistance required and those measures taken and when practicable, provide the State Party to which the request is directed and/or the operational coordinator with any other information necessary to determine the extent to which such State Party is able to meet the request. The other member state parties who are signatory to this convention may provide assistance to restore telecommunication system.

Cooperation and assistance solicited from ITU and other agencies was very useful in relief coordination activities. RBGAN terminal were deployed in field camps/hospitals and were used to send information about injured through e-mail to the main hospitals in cities for making necessary arrangements of required medicine. However, the assistance was very small as compared to the telecommunication needs spread over a vast area. Need was felt that Pakistan should be member of Tampere Convention to seek assistance from other member countries. Pakistan is acceding to Tampere Convention. Besides, we have also established our National Disaster Management Commission (NDMC) and National Disaster Management Authority (NDMA). NDMC will be the highest policy and decision making body to strategically manage calamities and promote culture of prevention and safety. The NDMA would serve as secretariat as well as national focal organization for implementation of policies. Tasks have been assigned to various Ministries and allied organizations.

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