INTERNATIONAL TELECOMMUNICATION UNION

Telecommunication Development Bureau

REPORT OF THE WORKSHOP ON THE ROLE OF TELECOMMUNICATIONS/ICT IN DISASTER MITIGATION
(Bandung, Indonesia, 28 March 2007)

Disasters have been on the increase in recent years and their magnitudes have also increased resulting in loss of life, injuries, and economic disruption and damage. The World Telecommunication Development Conference 2006 in Doha adopted a Programme to deal with Emergency Telecommunications that will assist Member States to integrate telecommunications/ICT in their disaster management from prevention, preparedness, response/relief to telecommunication infrastructure rehabilitation/reconstruction. A number of national and regional events are taking place with emphasis put on concrete projects and activities on the ground.

The Workshop on the Role of Telecommunications/Information and Communication Technology was held on 28 March 2007 and hosted by the Government of Indonesia. The Workshop was officially opened by Dr Basuki Iskandar, Vice Minister for Posts and Telecommunications, Mr. Sami Al Basheer Al Morshid, Director of BDT and Mr. Nyoman Wiryanata on behalf of the President Director of PT Telkom.

The Workshop was preceded by a two-day Rapporteur's Group Meeting on ITU-D Study Group 2 Question 10-2/2 on *Telecommunications for rural and remote areas*. Due to the strong link between access issues in rural and remote areas, it was considered important to hold the Workshop immediately after in order for it to benefit from the discussions that ensued during Question 10-2/2. The output of the Workshop is expected to contribute towards the Rapporteur's Group Meeting on Question 22/2 on the *Utilization of ICT for disaster management, resources, and active and passive space-based sensing systems as they apply to disaster and emergency relief situations.* The workshop was attended by 107 participants and addressed by **Mr. Cosmas L. Zavazava**, Head, Least Developed Countries, Small Island Developing States and Emergency Telecommunications, ITU/BDT the *Overview of ITU's Work in Emergency Telecommunications*, the Rapporteur of Question 22/2, **Mr. Thomas vonDeak**, Electronics Engineer, NASA Glenn Research Center

who presented on *the Remote Sensing for Disaster Prediction, Detection, Response and Relief*, the Rapporteur of Question 10-2/2, **Mr. Yasuhiko Kawasumi**, Special Advisor, Ministry of Internal Affairs and Communications, who presented on *the Contribution of Rural Telecommunications/ICT to Effective Disaster Relief*, **Mr. Azhar Hasyim,** Deputy Director General for Standardization, Directorate General of Posts and Telecommunications of Republic of Indonesia who presented the *Country Report of Indonesia*, Mr. Mushtaq Ahmad Bhatti, Director, Telecom, MoIT, Pakistan who presented the *Country Report of Pakistan*, Mr. Eliot Christian, US Geological Survey, who presented on *Early Warning System*. The keynote speech was given by Mr. Sami Al Basheer Al Morshid, Director of Telecommunications Development Bureau, ITU, presented the keynote speech titled *Harnessing the Potential of Telecommunications/ICT for Disaster Mitigation*.

1. With respect to providing telecommunications/ICT resources to Member States for disaster mitigation, the following were some of the key challenges that were identified:

    *   Institutional Constraints: To ensure the availability of well trained people in government and telecommunications operators. This will facilitate the mobilization of both personnel and resources at a faster pace when disasters strike.

    *   Regulatory Constraints: Need for clear legislation and guidelines that eliminate lengthy approval procedures that hamper the efficiency in the deployment of telecommunications resources e.g. delays in issuing public warnings due to complicated approval procedures required from different authorities that have the potential to increase the danger levels and casualties. Need for clear-cut clearance procedures for the entry of telecom equipment during an emergency situation. The adoption and the ratification of the Tampere Convention could facilitate that process.

    *   Technical Constraints: Lack of or limited resources for purposes of training and retraining qualified telecom personnel. Maintaining of the necessary equipment or disaster kits and for disaster relief/response. It also includes issues of whether or not the telecom network can cope with network congestion in the immediate aftermath of a disaster.

    *   Financial Constraints: Lack of financial resources that constitute a stand-by fund that can be used in emergencies.

2. With respect to the above challenges, the Workshop:
    a) Expressed strong support for the ITU Framework for Cooperation in Emergencies (IFCE) and expressed the need for this initiative to be launched and implemented. The IFCE is an ITU initiative that seeks to provide a holistic approach to disaster mitigation through telecommunications/ICT. It has three clusters:

- Technology Cluster: Consists of Satellite Operators and Land Earth Station Operators, Telecommunications Operators especially Mobile Service Providers, and Geographical Information Systems (GIS).
- Finance Cluster: Consists of all potential sources of funding such as Member States in terms of Funds-In-Trust, regional economic groups, development banks, private sector, etc.
- Logistics Cluster: Consists of providers of support services such as air transport providers and international couriers.

For a detailed explanation on the IFCE, see Annex 1

b) Urged Member States and other stake holders to contribute to the IFCE.
c) Requested ITU/BDT to continue to pro-actively find new ways of assisting Member States in incorporating telecommunications/ICT in their disaster management programmes.
d) Requested ITU/BDT in accordance with WTDC-06 Resolution 34 to assist countries in their efforts to put in place early warning systems and to ratify and implement the Tampere Convention.
e) Urged the two ITU-D Study Group 2 Questions 10-2/2 and 22/2 to continue to build synergies aimed at coming up with recommendations that may contribute towards promoting Emergency Telecommunications.
f) Requested ITU/BDT to explore additional innovative ways and initiatives in assisting Member States in using telecommunications/information and communication technologies for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief as part of implementing the ITU Plenipotentiary Conference (PP-06) Resolution 136.
g) Requested ITU/BDT to assist Member States in the ratification of the Tampere Convention in accordance with ITU Plenipotentiary Conference (PP-06) Resolution 36.

This document was adopted during the closing session of the Workshop on the Role of Telecommunications/ICT in Disaster Mitigation held in Bandung, Indonesia on 28 March 2007 under the Chairmanship of Dr. Alexander Rusli, Special Advisor for the Minister for Communication and Information Technology, Republic of Indonesia.

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