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# **Workshop on Emergency Telecommunication for Disaster Management in Bangladesh**

**Dhaka, 29 March 2006**



## Outline of Presentation:

1. Background of the study
2. Conclusions and recommendations
3. Workshop methodology



## What is an Emergency?

By definition, an **Emergency** is a situation requiring urgent response. Depending on the circumstances, initial response will be provided by whoever is present, using whatever means are available.

Any other additional intervention deemed necessary can be mobilized through **Telecommunications**.

An emergency situation might develop into a **Disaster**, either due to its nature, or as a consequence of insufficient response to the initial event

Damaged MW Tower  
April 1991



## Background of the study:

- Tsunami in December 2004
- ITU response – emergency telecom.
  - Counterpart Agency: BTRC
- **ITU Mission:** 11 -18 September 2005

### Team:

ITU Regional Office for Asia & the Pacific  
Asian Disaster Preparedness Center (ADPC)

### Mission Tasks:

- assess the current emergency telecommunication system of the country &
- present the findings and recommendations of the study to the stakeholders.



## Methodology of the study:

- Visits and discussions with relevant agencies
- Gathering and study of relevant information through questionnaires
- Fusion of conclusions and recommendations
- Preparation of the Assessment Report



## Past Disaster experiences:

- Unharmful public systems were congested
- Power / Fuel, the main concern after repair
- Informal cooperation between operators
- Radio Amateurs opened service



## Initial Findings:

- Bangladesh has a robust telecom system in place.
- Government agencies have yet to upgrade their existing telecommunication networks.
- Most government agencies rely on the Bangladesh Telegraph and Telephone Board (BTTB) transmission networks.
- CPP has a very effective com. network at the village level.



## Initial Findings:

- Institutional constraints:
  - Emergency communication - not clearly defined in the Standing Orders on Disasters.
  - Disaster contingency plans have yet to be institutionalized (by private telecom operators).



## Initial Findings:

- Regulatory constraint - No specific rules to be activated in case of an emergency situation
- Financial constraint - Limited budget for maintenance
- Technical constraint - Existing telecommunication facilities are based on the cyclone in 1991 and the flood in 1998. However, there are no data on tsunami during the past.



## Leading thoughts:

- ✓ Rely on proven established technologies!
- ✓ Enhance GSM and backbone infrastructure!
- ✓ Cost of ownership include O/M
- ✓ Standardized solutions are cheaper!



## Recommendations:

- Inclusion of a tsunami early warning system in the SOD (for an all hazards EWS)
- Setting up of a National Emergency TeleCOmmunication Management (NETCOM) Team/Committee
  - Assure emergency com. for selected users
  - Promote resilient public telecommunication
  - Liaise with emergency and disaster agencies and organizations
  - Initiate workgroups to create solutions



## Recommendations:

- Identify and educate ICT Technicians and Radio Operators
- Regular communication drills
- Satellite Phones  
Possible roaming
- Advocate SMS use in emergencies



**NGOs - Big players**

**UN - use UNDP as umbrella**





# Operator Recommendations

## Contingency Initiatives



- **Establish Priority!**
- **Advocate Secure SMS**
- **Service Level Agreements**
- **Enable National Roaming**





## **Multi Hazard Early Warning System**

**Retrieving Sensor Information**  
**Real Time ?????**

**Dissemination of Warnings to the Public**

- Broadcasting**
- Television**
- SMS/Cell Broadcast**
- Police's Radio Systems**



# Working Method

- **Introduction of Participants**
- **Presentations**
- **Discussions**  
clarifications of items from the presentations  
identification of issues and concerns  
make action plans for implementation
- **Conclusions and Recommendations**  
**Action Items, Next Steps**

<http://www.cegisd.com/gisrs/gisprojects.htm>



# Elements of an Early Warning System

