The Critical Role of Emergency Telecommunications in Disaster Risk Reduction

ITU/ESCAP Joint Regional Workshop on Disaster Communications

12-15 December 2006, BANGKOK THAILAND

ITU - FACTS

o   UN specialized agency focusing on development of telecommunication/ICT and leading the WSIS – its outcomes/action lines *inter alia*

o   141 years old (2006) since 1865

o   191* Member States; 650+ Sector Members (e.g., regulators, industry, R&D institutes, Universities, Financial institutions, Int'l/Regional Organizations etc.)

o   Around 700 staff/83 nationalities

o   Headquarters in Geneva

o   Asia-Pacific regional/area offices in Bangkok and Jakarta for about 40 Member States

o   websites: http://www.itu.int (Global) & http://www.itu.int/ITU-D/asp/ (Asia-Pacific)

ITU – THREE SECTORS

ITU

Helping the World Communicate

ITU-T

Telecommunication standardization
- network and service aspects

ITU-D

Assisting implementation and operation of telecommunications in developing countries

ITU-R

Radiocommunication standardization and global radio spectrum management

Impact of Recent Disasters

o In 2005, 91,900 people killed(18% rise from 2004)

o 157 million people required immediate assistance.(5% rise from 2004)

o 159 billion USD in damage.(71% rise from 2004)

ITU and Standards

o Standards for interoperability of telecommunication networks

o Standards for prioritization of calls International emergency preference scheme for disaster relief (Rec. E. 106)

o Global network security standards

ITU and Frequency Management

o Studies implementation of disaster alerting, and relief technologies

o Application of amateur and amateur-satellite services (Rec. M. 1042-2)

o Support to emergency broadcasting, maritime and public safety signals.

o Study the protection and spectrum needs of advanced meteo/earth explolaration satelitte systems (WRC-07)

Telecommunication Development

o	Integrating ICTs into existing and new early warning systems

o	Helping developing countries with emergency telecommunications as part of the response effort following disasters

o	Rebuilding of telecommunications damaged by disaster

o	Partnering for Disaster Reduction with other Organizations

o	Publishing Best Practices and Handbooks

ITU-D: Disaster Response/Relief & Reconstruction

❑ Deployment of satellite equipment and provision of operational and technical training (ITU pays the bills).

❑ Network damage assessment

❑ Network rehabilitation planning

❑ Resource mobilization

Challenges and Threats

- Technological Issues: Access

- Legal and Regulatory issues

- Coordination

- Financing

Bridging the Gap between Rural and Urban (universal Access)

- ICT should be high on the national development agenda
- Regulation must move in tandem with technology
- Introduce low-cost, affordable ICT/telecommunication technologies
- ICT should provide a SECURED link for all citizens
- Focus on Community based approaches rather than households
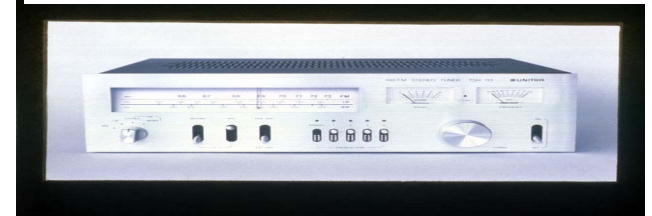(universal access rather than universal services)

Strategies: Embrace Convergence

Broadcasting
TV

Broadcasting

Radio

Info. Technology
• Internet

Telecoms
• Fixed
• Mobile

Harmonize Laws and Regulations

o Adoption of appropriate treaties such as the Tampere Convention

o Open standards that can help interoperability of networks and prioritization of calls

The "Tampere Hall" in Tampere Finland, where the Treaty on Telecommunication For Disaster Mitigation and Relief was signed on 18 June 1998.
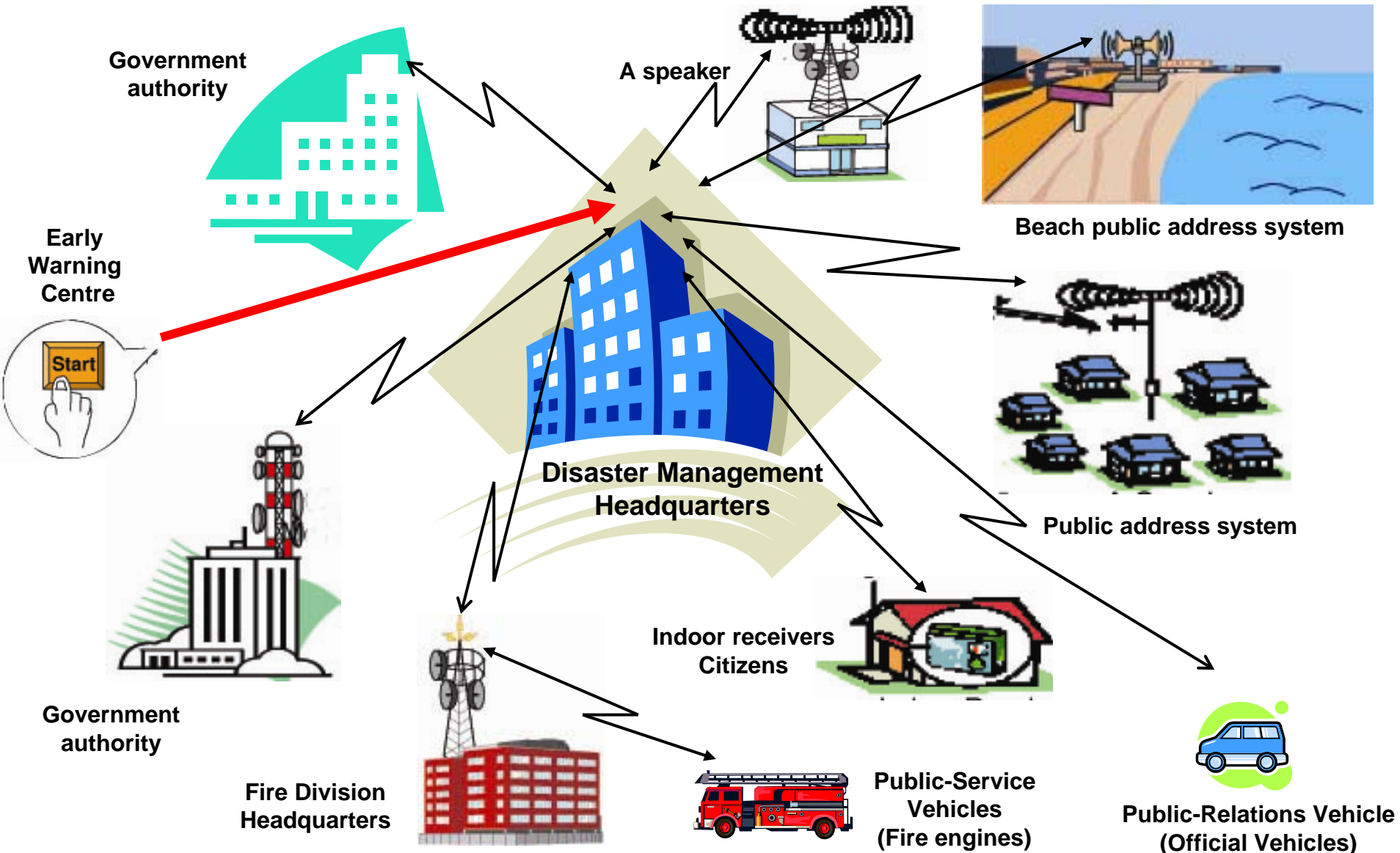
Improved Coordination

o **Global**: Adopt relevant standards

o **National**: Involve all stakeholders and use a multidisciplinary approach

o **At All Times**: Build Platforms for Public-Private Partnerships (PPPP)

Role of Emergency Telecommunications

Government authority

A speaker

Beach public address system

Early Warning Centre

Start

Disaster Management Headquarters

Public address system

Government authority

Fire Division Headquarters

Indoor receivers Citizens

Public-Service Vehicles (Fire engines)

Public-Relations Vehicle (Official Vehicles)

Some Thought for Disaster Communications

❑ Formation of "Disaster Communication Management Team"

❑ Development of a *"National Emergency Telecommunications Plan"*

❑ National roaming

❑ Call prioritization

❑ Adoption of appropriate treaties such as Tampere Convention

THANK YOU

Cosmas Zavazava – cosmas.zavazava@itu.int
ITU Telecommunication Development Bureau (BDT)
www.itu.int/ITU-D/emergencytelecoms/

Presented by: Wisit Atipayakoon – wisit.atipayakoon@itu.int
ITU Telecommunication Development Bureau (BDT)
Regional Office for Asia and the Pacific

Workshop presentation paper can be found at:

http://www.itu.int/ITU-D/asp/Events/ITU-ESCAP-BangkokDec2006/index.html