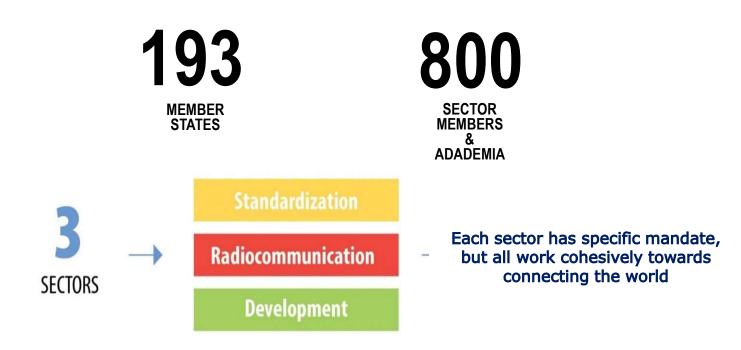


Ms. Mijke Hertoghs
Head Environment & Emergency Telecommunications, ITU

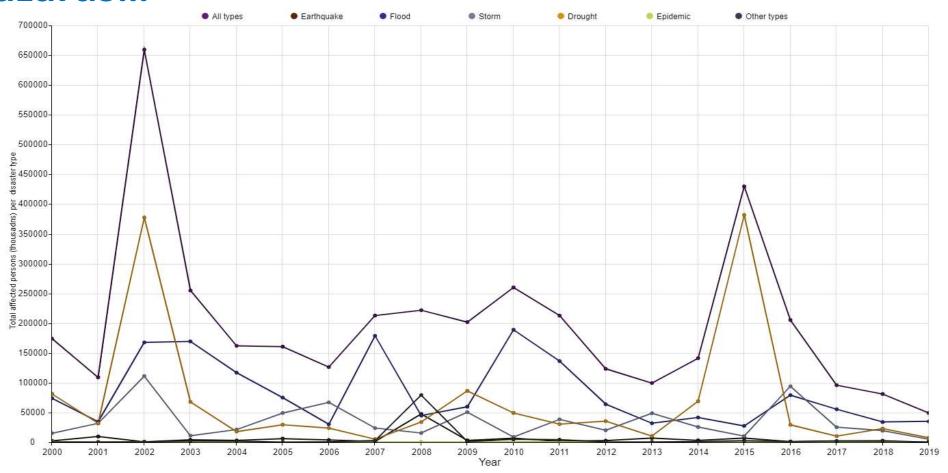
ITU: Committed to help the world communicate



... and to help achieve the SDGs through the use of ICTs



Every year millions of people are affected by natural hazards...



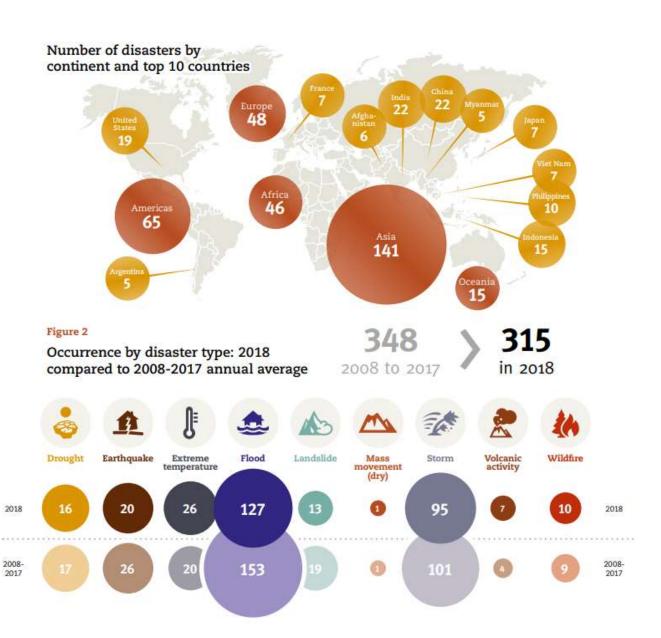
Source: EM-DAT: The Emergency Events Database - Université catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium

Number of disasters around the world









When disasters strike, ICTs play a critical role...

ICTs are a critical enabler for disaster response. Timely, predictable and effective information is urgently needed by government agencies and other humanitarian actors involved in rescue operations and decision-making processes. No response and relief efforts can be delivered without telecommunications.



Mitigation

- Hazard and vulnerability assessment and mapping
- · Data collection, recording and analysis
- Awareness raising and education campaigns
- Development of policies and legislation
- Development of regulatory frameworks
- Allocation of financial resources
- Establishment of public-private partnerships



4

Recovery

- Build resilient ICT infrastructure
- Restore telecommunication infrastructure and services
- Restore public sector operations
- Identify best practices and lessons learned

2

Preparedness

- Development and implementation of National Emergency Telecommunication Plans
- Development of Standard Operating Procedures
- Implementation of Early Warning Systems
- Capacity building and training exercises
- Information and knowledge sharing
- Implementation and use of new technologies
- Preparation of back up energy systems
- Use of satellite imagery



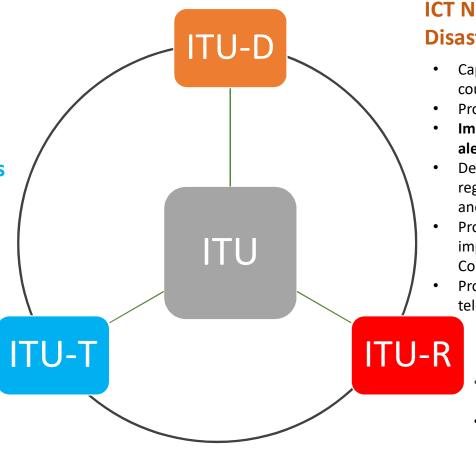
Response

- Establishment of ICT solutions and links for first responders
- Provision of ICT solutions for inter-agency coordination
- Damage and needs assessment
- Provision of telecommunication facilities to affected population
- Importation of equipment

ITU's role

Disaster management, network resiliency and recovery recommendations and best practices

- Collects and documents information and concepts helpful to the work on disaster relief systems/ applications, network resilience and recovery from a telecommunication network perspective
- Critical information infrastructure protection
- Standards development and adoption such as common alerting protocol (cap, x.1303)
- Energy efficient devices standards, etc.
- Smart Cities, villages, etc.



ICT Needs of Developing Countries for Disaster Management

- Captures the unique needs of developing countries
- Promulgates and promotes DRR solutions
- Implements projects on disaster warning and alerting systems
- Development and review of policies and regulations on emergency telecommunications and climate change adaptation
- Promotes international cooperation and implementation of standards – Tampere Convention, Common Alerting Protocol (CAP)
- Provides direct assistance during emergencies on telecommunications

Radiocommunications in DRR

- Satellite services regulation meteo services, earth observation, etc.
- Develop recommendations and reports on radiocommunications for disaster management
- Emergency frequency allocation best practices

Areas of action of ITU-D's work on emergency telecommunications (ET)

Engagement and awareness Emergency Telecommunications assistance Global Emergency National ET Plans.

National ET Plans, Policy, Regulation

ET and Disaster Management

Response Coordination

Advisory

Early Warning and Alerting

Project

implementation

ET
Infrastructure
Design &
Development

ICT Applications for DRR and DM

Information sharing

Guidelines, Reports & Good Practices

Study Group Question

WSIS Action Line C7

Capacity building

Technical Hands-on Trainings

Strategy
Development
&
Management
Trainings

Tampere
Convention:
Ratification &
Implementation

Telecommunications

Forum

Regional and

National Events

Partnership
Development,
Cooperation &
Collaboration

Assistance



DEPLOYMENT OF RESOURCES



PROJECT IMPLEMENTATION



POLICY AND REGULATION



CAPACITY BUILDING



DEPLOYMENT OF EMERGENCY TELECOM EQUIPMENT WHEN DISASTERS STRIKE



SUPPORT OF UN, NGOs AND OTHERS THROUGH LICENSING AND FREQUENCIES ASSIGNMENTS



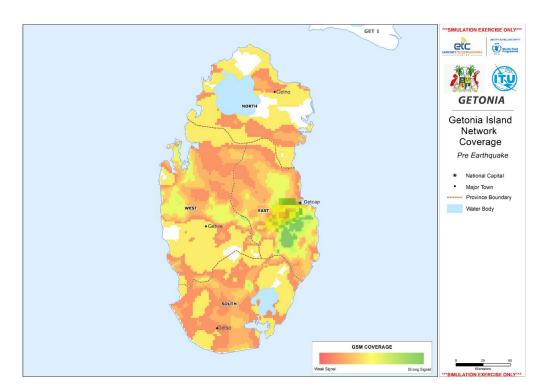
SETTING UP TELEMEDICINE FACILITIES FOR EASY DELIVERY OF HEALTH SERVICES

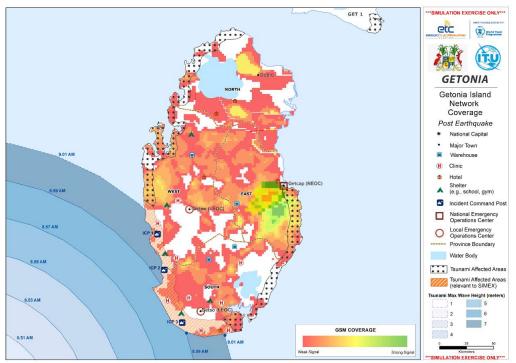


ASSESSMENT OF NETWORK DAMAGES AND REHABILITIATION

Disaster Connectivity Map initiative

To build a partnership for the development of a live map that during times of disasters can provide information on the type, level and quality of connectivity that is available on the ground.





GUIDELINES

on

National Emergency Telecommunication Plans



Emergency Telecommunications





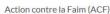
ITU has responded to over 50 emergency worldwide

ANITARCTICA

Natural Hazards linked to the response: Ocyclone Earthquake Ebola Flood Hurricane Migration Storm Tropical Cyclone Tsunami Typhoon Volcano

ETC Cluster Partners







Ericsson Response





Global VSAT Forum



Directorate for Development Cooperation and Humanitarian Affairs

Government of Luxembourg, Ministry for Development Cooperation & Humanitarian Affairs



International Committee of In the Red Cross (ICRC)



International Federation of Red Cross and Red Crescent Societies (IFRC)



International Organization for Migration (IOM)













UN Children's Fund (UNICEF)



UN Department of Field Support (UNDFS)



UN Department of Safety & Security (UNDSS)



UN Office for the Coordination of Humanitarian Affairs (OCHA)



Save the Children



Swedish Civil Contingencies Agency (MSB)



Télécoms Sans Frontières (TSF)



U.S. Department of State



United Nation's Refugee Agency (UNHCR)



United Nations
Development Programme
(UNDP)



World Food Programme (WFP)



World Health Organization (WHO)

Crisis Connectivity Charter































ITU's Key Partners







The mobile satellite company

















ITU Framework for Cooperation in Emergencies

Technology Cluster

- Satellite Operators and Service Providers
- Land Earth Station
 Operators
- Telecom Operators
- GIS and Remote
 Sensing Operators
- Radio Communication Equipment Providers

Financial Cluster

- Governments
- Private Sector
- Development Banks
- Regional Economic Groups
- Philanthropic foundations
- International Organizations

Logistics Cluster

- International Couriers
- Air-TransportOperators
- National Airlines
- International Organizations



ITU emergency telecommunications roster

The main role of ITU roster:

 To engage relevant government and regulatory authorities to facilitate the importation and use of communication equipment for the purpose of disaster relief

The fast-track expedition of customs clearance processes and enabling organizations to provide a fast response in a timely manner

To provide training on the use of sat phones and BGAN terminals on the ground

Project Implementation



Early Warning and Alerting Systems

• EWS in Uganda and Zambia, Tsunami Warning, etc.

ICT Applications for Disaster Risk Reduction

• Big Data Secure Storage for CDRs in Sierra Leone, Liberia and Guinea (Ebola), Coordination Platforms, etc.

Emergency Telecommunications Infrastructure Design and Development

• ET Infrastructure Design for Haiti, Mongolia, etc. Emergency Operation Center Design in Africa Region, etc.

Early Warning Systems











Thank you!!!

Contact us: BDTLSE@ITU.INT