ITU Activities in Disaster Risk Reduction and Disaster Management

Emergency Telecommunications Cluster - ETC - Meeting

Panama, Feb 5 2018

ABOUT ITU

Is the United Nations specialized agency for information and communication technologies – ICTs

Founded in 1865 (152 years old)

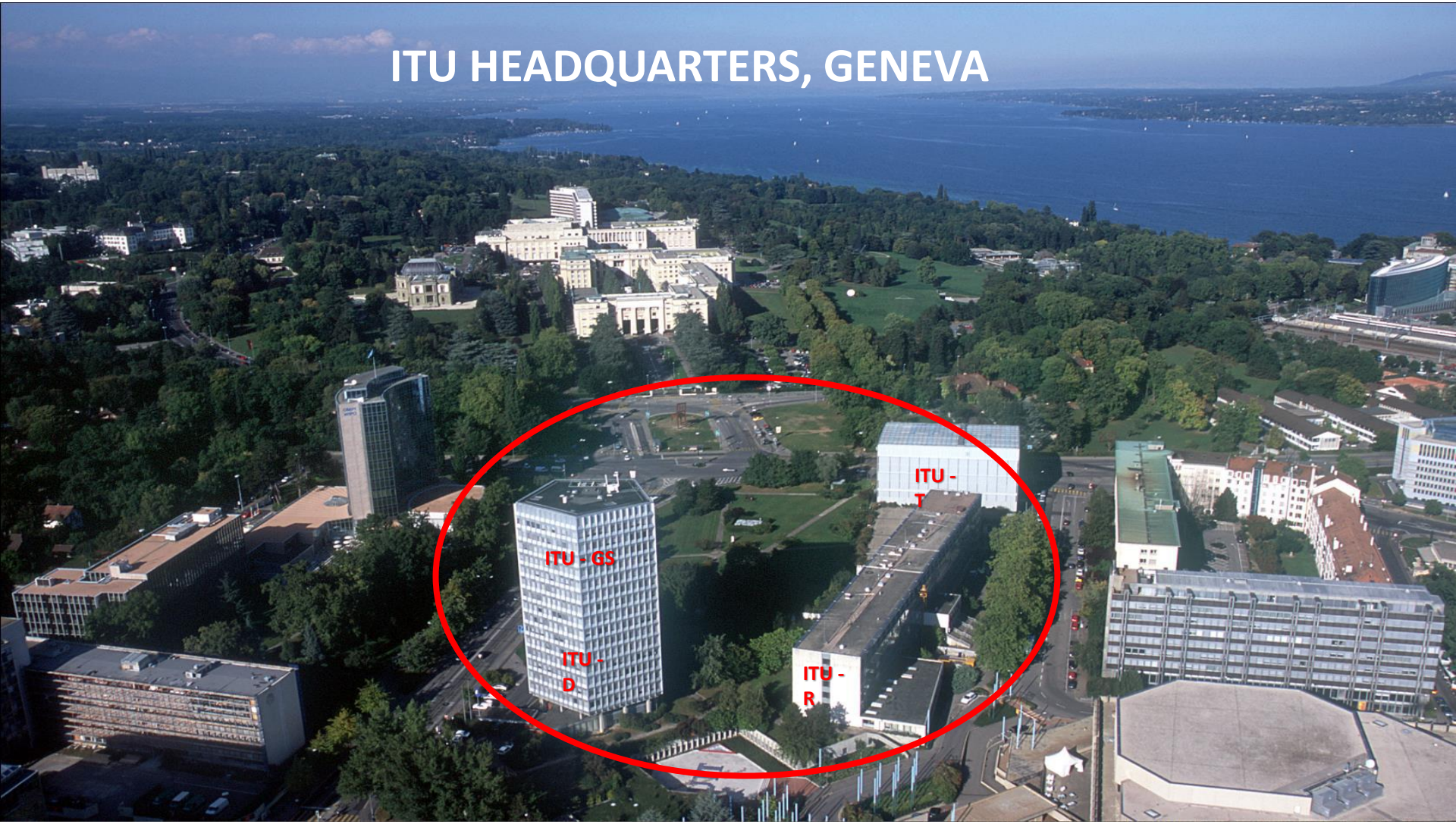
193 Member States and 700 + Sector Members and Associates and 130+ Academia.

Over 750 employees, from more than 80 nationalities.

Organized in three Sectors:

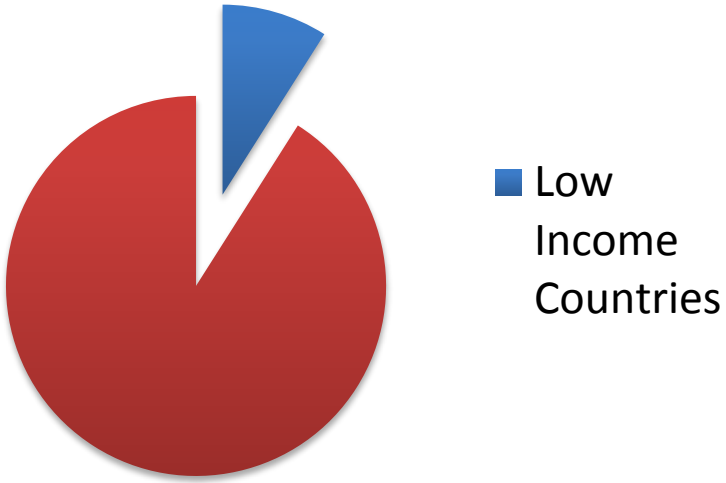
- Radiocommunication (ITU-R)
- Standardization (ITU-T)
- Development (ITU-D)

ITU HEADQUARTERS, GENEVA

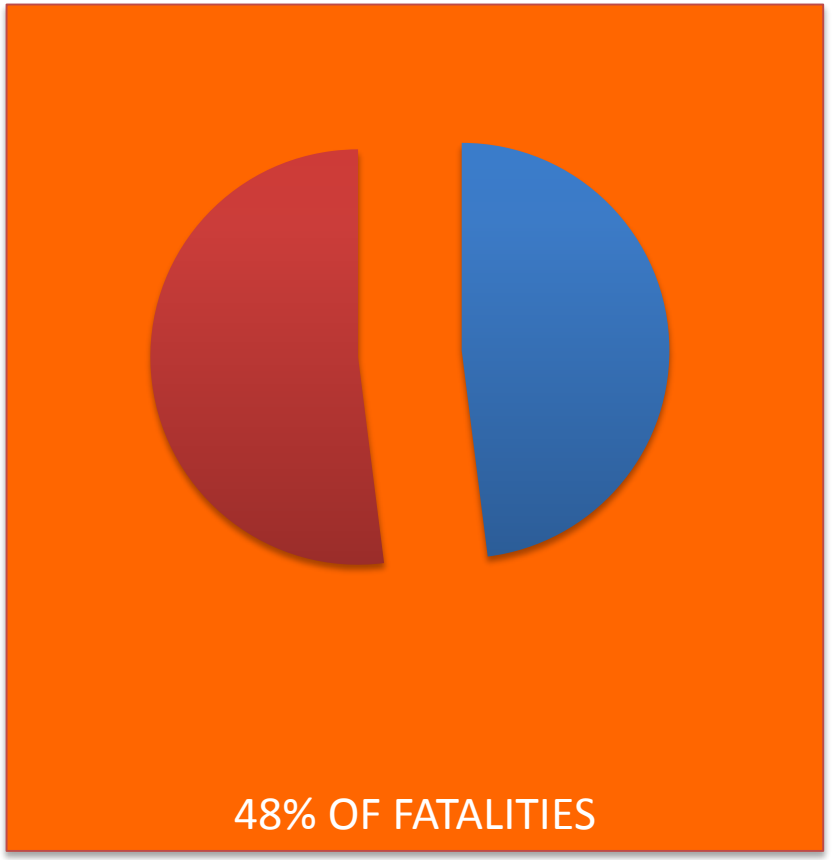


DISASTERS ARE ON RISE AND AFFECT EVERYONE

but they impact poor and vulnerable the most



LOW INCOME COUNTRIES ACCOUNT ONLY FOR 9% OF THE WORLDS DISASTERS, BUT ……

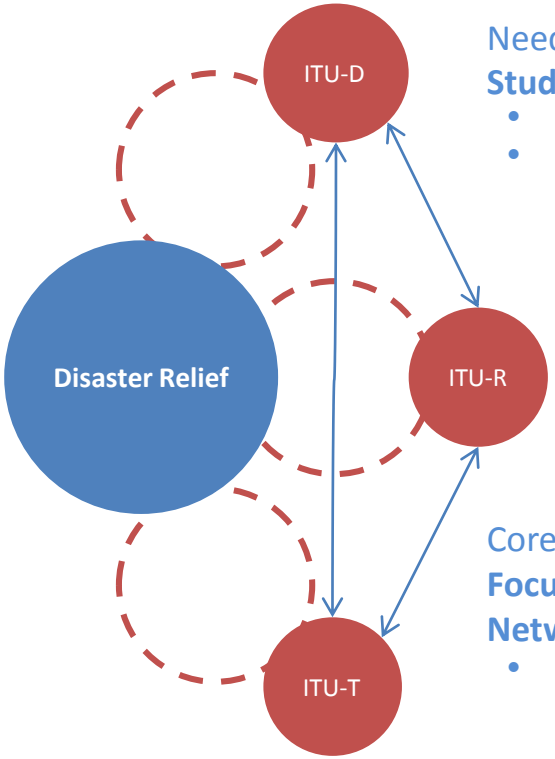


WHY EMERGENCY TELECOMMUNICATIONS

- Alert the population before, during and after the disaster
- Convey necessary information for important decision-making during all the phases of a disaster
- The coordination during the interventions between the different actors, entities.

Saving Lives

LET's WORK TOGETHER FOR THE GOOD OF ALL



Needs of Developing Countries for Disaster Relief

Study Group 2 Q.22

- Captures the unique needs of developing countries
- Promulgates and promotes disaster relief solutions

Radiocommunications for Disaster Relief

ITU-R Study Groups 4, 5, 6, and 7

- Develop Recommendations and Reports on Radiocommunications for Disaster Relief
- Incorporate cutting-edge radiocommunications technologies from SDOs

Core Network for Disaster Relief

Focus Group on Disaster Relief Systems, Network Resiliency and Recovery

- Collects and documents information and concepts helpful to the work on disaster relief systems/ applications, network resilience and recovery from a telecommunication network perspective

DISASTER RELIEF BY ITU

- Huge number of people are affected under disaster
- All sectors of ITU are working to contribute to disaster relief from the telecommunication/ICT aspects … to make a big difference
- Disaster relief activities include preparation for possible disasters, early detection, rescue, evacuation assistance, safety confirmation, recovery assistance, etc.

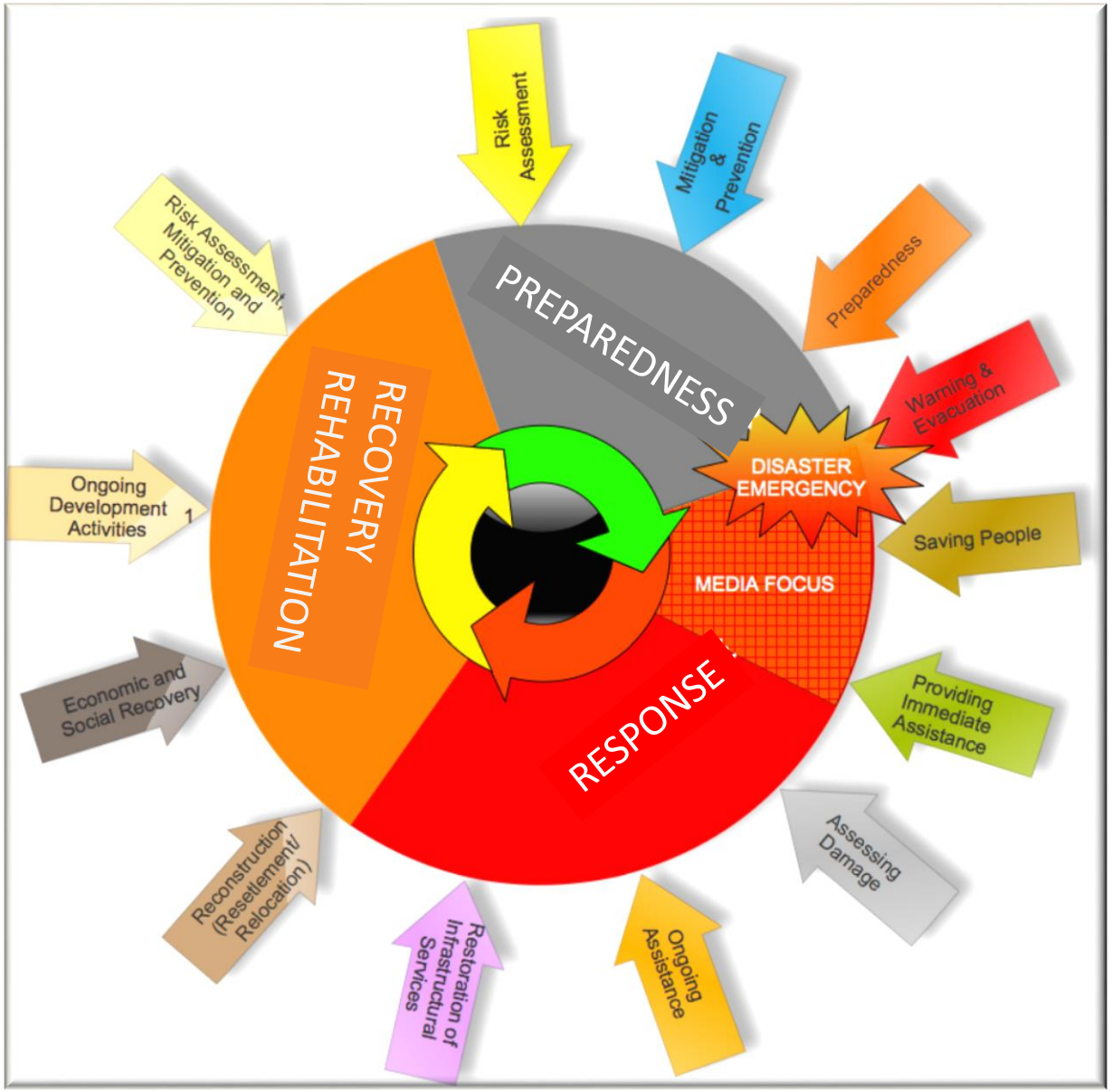
TELECOMMUNICATIONS/ICTs FOR DISASTER MANAGEMENT

1. ***PREPAREDNESS***: actions, arrangements and procedures taken in anticipation of an emergency to ensure a rapid, effective and appropriate response that may save lives and livelihoods.

2. ***RESPONSE***: is a phase of the disaster management cycle. Its preceding cycles aim to reduce the need for a disaster response, or to avoid it altogether.

3. ***REHABILITATION AND RECOVERY*****:** Following a disaster and when the initial crisis is over, people affected and the communities that support them are still in a state of heightened vulnerability. Most of the telecommunications networks may have been affected. Post-emergency rehabilitation programmes are frequently needed.

DISASTER LIFECYCLE PHASES



MISSING AND CRITICAL ITEMS

- The items below were identified
  - Disaster relief for individuals (to notify the damage situation from victims to their relatives, friends, or employers)
  - Disaster relief guidance (to show victims the routes to evacuation shelters, home, etc.).
  - Network resilience and recovery capability of infrastructure to cope better with disasters

ITU & EMERGENCY TELECOMMUNICATIONS

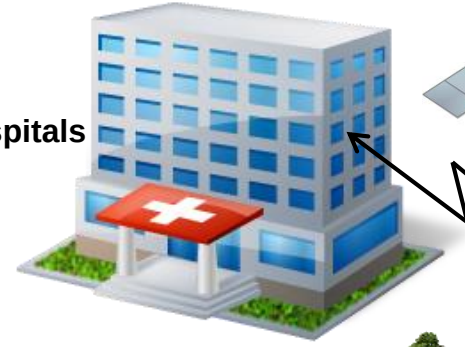
As an integral part of Telecommunications Development Bureau (BDT), the division implements **activities** related to telecommunications/ICTs in:

1. ***Disaster Risk reduction***: focuses on the mitigation and preparedness aspects of the emergency cycle
2. ***Disaster Management***: a systematic process that aims to reduce the negative impacts or consequences of adverse events.
3. ***Climate change mitigation and adaptation***: a response that seeks to reduce the vulnerability of natural and human systems to climate change effects.

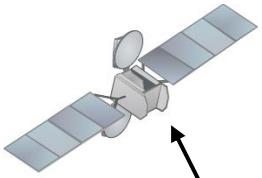
ITU & EMERGENCY TELECOMMUNICATIONS

- Our work can be summed up in four principles:
  - **Multi-hazard**: providing the necessary medium and link to mitigate disasters irrespective of their nature.
  - **Multi-technology**: promoting the use of any form and means of telecommunications that can contribute to universal access or access by the majority of the people.
  - **Multi-phased**: ICTs are critical at all stages of disaster management and also are essential in reducing vulnerability of people.
  - **Multi-stakeholder**: communicating rural and local communities, the central government, the private sector, civil society and International Organizations, among others.

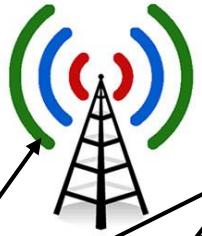
ROLE TELECOMUNICATIONS/ICTs IN DISASTER MANAGEMENT



Hospitals

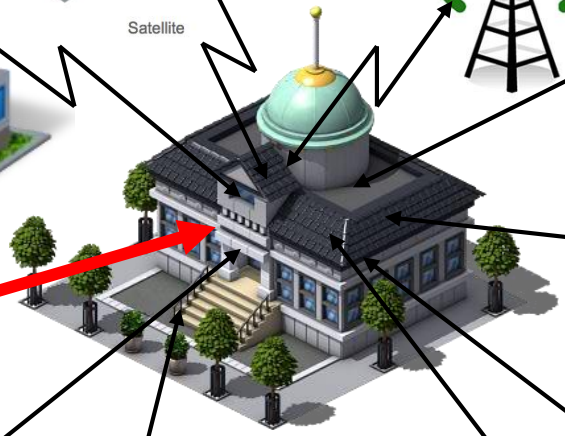


Satellite



Broadcasting

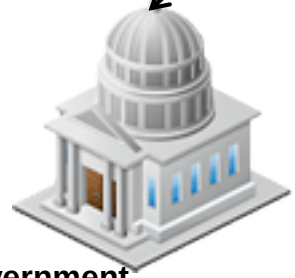
Beach public address system



Early Warning Centre

Disaster Management Headquarters

Public Announcing System



Government authority

Fire Division Headquarters

Indoor receivers Citizens

Public-Relations Vehicle (Official Vehicles)

Public-Service Vehicles (Fire engines)

KEY ACTIVITIES OF ITU

- Designing National Emergency Telecommunications Plans and formulating Standard Operating Procedures
- Deploying telecommunication resources during emergency situations such as satellite telecommunications equipment for voice and data services to support communication needs in the field.
- Human and Institutional Capacity Building
- Assisting countries to formulate policies and draft appropriate regulations for emergency telecommunications
- Forging stakeholder partnerships as a form of resource mobilization, etc.

KEY ACTIVITIES OF ITU

- Project Development and Implementations (Early Warning Systems, Remote Sensing, etc.)
- Development of manuals, handbooks, etc. on the use of ICTs for emergencies
- Assistance in Telecommunications Infrastructure Reconstruction
- Meeting ICTs and emergency telecommunication needs of Member countries in particular LDCs, LLDCs and SIDS
- Plan workshops, forums, conferences on emergency telecommunication and climate change adaptation

AVAILABLE ITU RESOURCES

Handbook on Emergency Telecommunications

Compendium of ITU's work on Emergency Telecommunications

Best Practice on Emergency Telecommunications

Handbook on Disaster Communications

http://www.itu.int

THE TAMPERE CONVENTION – A LIFE-SAVING TREATY

- Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations came into force 8 January 2005 and more of 45 parties on board.
- The Tampere Convention calls on States to facilitate the provision of prompt telecommunication assistance to mitigate the impact of a disaster, and covers both the installation and operation of reliable, flexible telecommunication services. Regulatory barriers that impede the use of telecommunication resources for disasters are waived.

IMPORTANCE OF ITU's ASSISTANCE

ITU deploys satellite terminals and other emergency telecommunication equipment to affected countries within the first 24 to 48 hours aftermath a disaster to help restore vital communication links.

The equipment is crucial in:

- Coordinating rescue and relief operations;
- Setting up telemedicine links between hospitals and medics in the field;
- Providing call centers where disaster victims can contact their loved ones.
- Coordinating infrastructure recovery/re-building operations.

ITU bears the costs for the delivery of equipment, service subscription and airtime charges.

http://www.itu.int/en/ITU-D/Emergency-Telecommunications/Pages/Response.

HOW TO REQUEST ASSISTANCE

- Always send their requests to the ITU/Telecommunication Development Bureau (BDT)
- An agreement will be signed between ITU and the requesting country
- ITU will respond quickly to meet the needs

ITU emergency telecommunications equipment deployed in 2016-2017

ITU EMERGENCY TELECOMMUNICATIONS EQUIPMENT DEPLOYED IN 2016 -2017

- Fiji (2016)
- Ecuador (2016)
- Sri Lanka (2016)
- Haiti (2016)
- Zimbabwe (2017)
- Caribbean Islands, including Haiti, Dominica and Antigua and Barbuda (2017)

Other ITU emergency telecommunications activities in Americas in 2017

CAPACITY BUILDING

- The II Workshop on Technologies for mitigating the effects of earthquakes and tsunamis was organized in Pisco, Peru on 21 and 22 June 2017.
- ITU build capacity in Members States through the Second Multi-stakeholder Forum on the Role of Telecommunications/ICT in Disaster Management, which took place from 29 to 31 August 2017, in Bogotá, Colombia. The Forum, which was attended by about 400 participants, was organized by the ITU Telecommunication Development Bureau (BDT) and the Ministry of Information Technologies and Communications (MINTIC) of Colombia. The 2017 Forum served as a platform to exchange new experiences and best practices in the use of modern technologies for monitoring and for the establishment of multi-hazard early warning systems.

ALTERNATE REGIONAL EMERGENCY TELECOMMUNICATIONS NETWORK

- ITU signed a Memorandum of Understanding on Emergency Telecommunications with CITEL, COMTELCA and CTU signed during the WTDC-17 in Argentina.
- As a result of the MoU LoI signed, a Pilot project on establishment of an Alternate Regional Emergency Telecommunications Network in the Americas Region was prepared to assist the beneficiary countries in enhancing their emergency telecommunications capabilities and to improve emergency and disaster response. The Pilot Project will be implemented in 2018 as a pilot project in 7 beneficiary countries of Central America. The solution consists of implementing the Alternate Regional Emergency Telecommunications Network in beneficiary countries, providing the Emergency Operations Centers (EOC) of ITU Member States with the necessary equipment (RMS server and client function) to connect to the network Winlink 2000, under the characteristics of redundancy and autonomy.

CONCLUDING REMARKS

- Integrate National Emergency Telecommunication Plans into Disaster Management Plans
- Develop Standard Operating Procedures
- Establish multi-disciplinary partnerships
- Develop and use ICTs for disaster prediction, detection monitoring, and response
- Design and Develop Early Warning Systems
- Establish collaboration platforms to share information for better preparedness and response
- Strengthen Institutional Capacities through training
- Link the Development and Disaster Management agendas to optimize the use of resources.

Thank you

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