

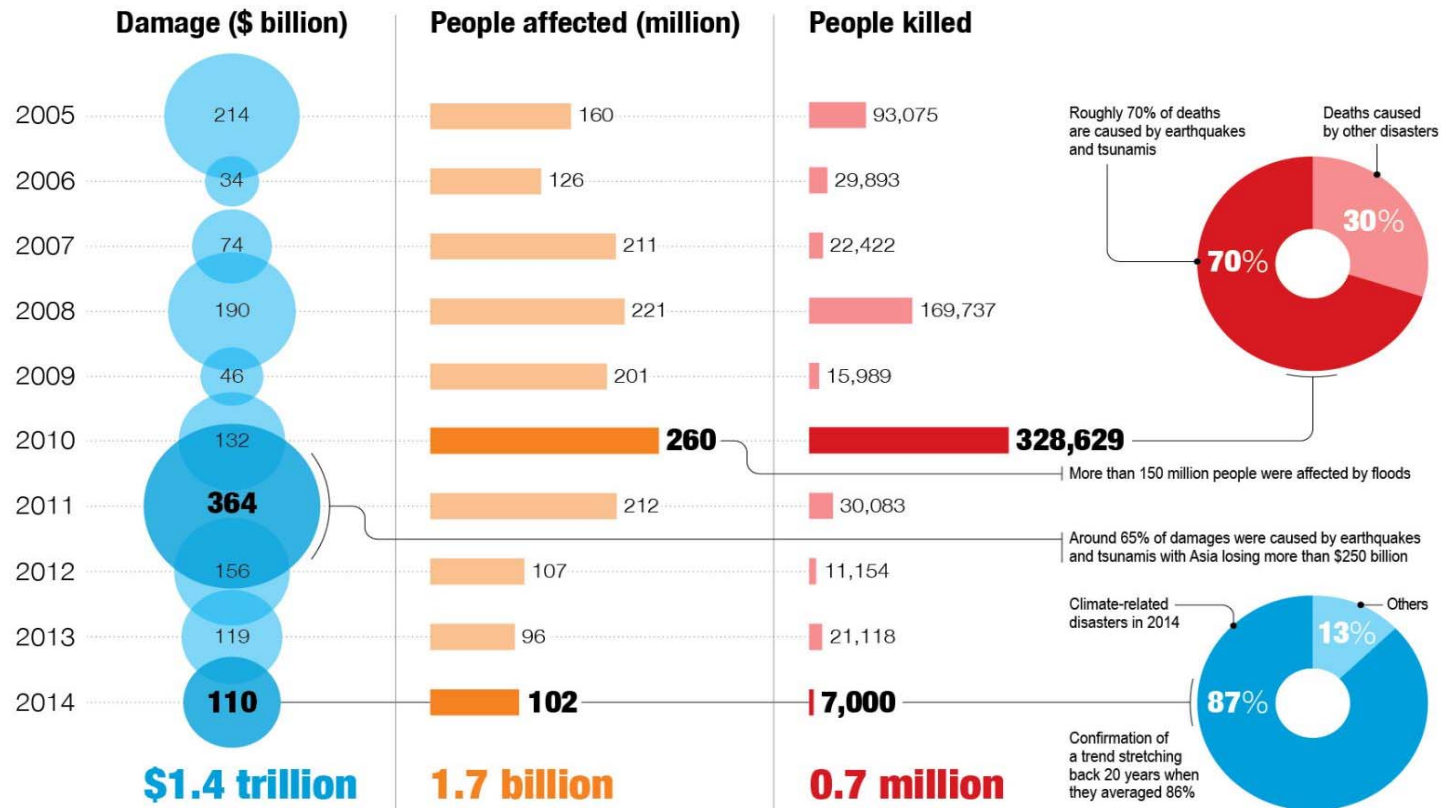


Telecom Regulators and Disaster Management





Disaster Impacts 2005 - 2014



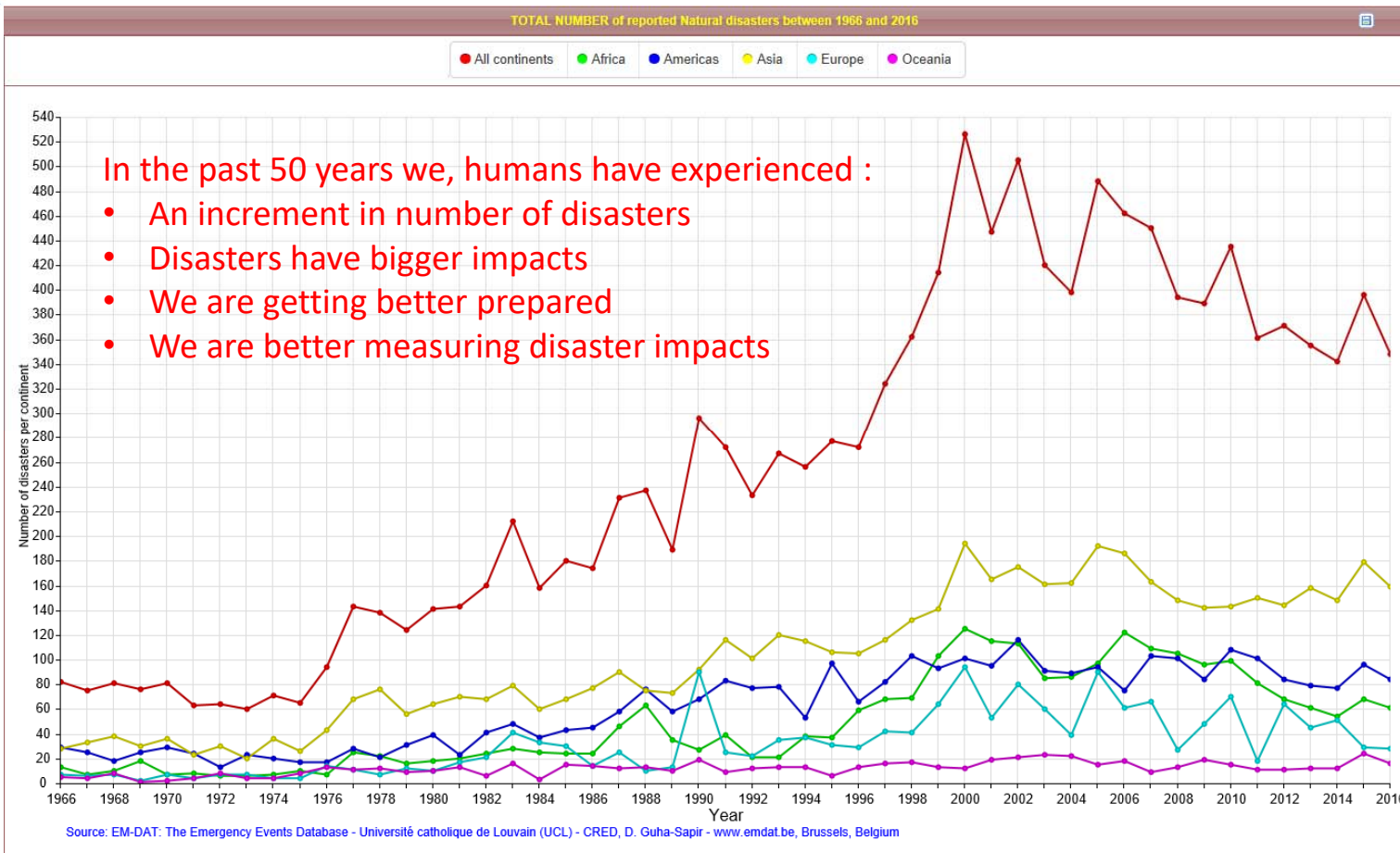
Source: UNISDR



Number of Natural Disasters (1966-2016)



9-20 October

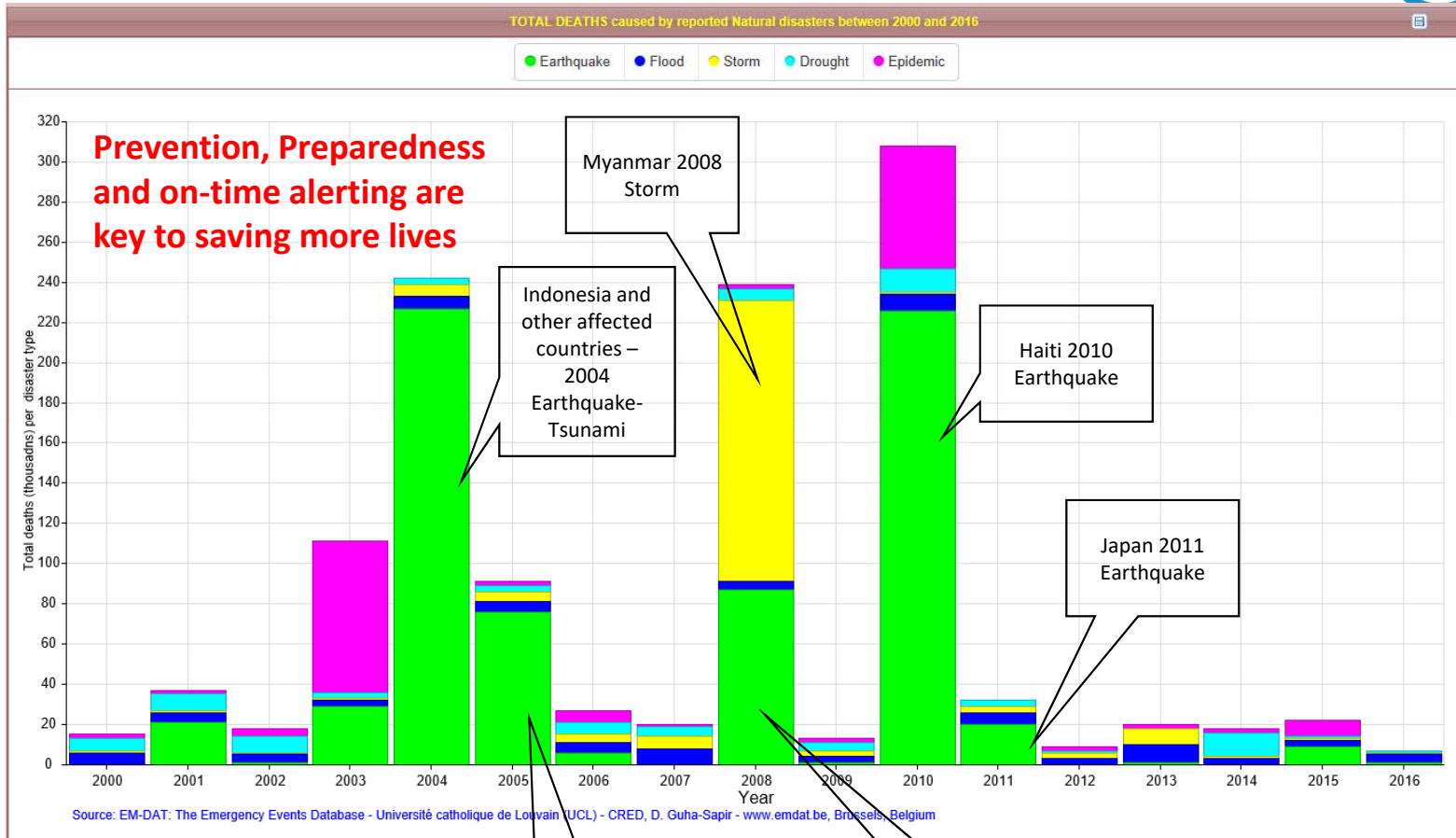




Lost Lives (2000-2016)



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Even the most resilient nations face large human and economic losses



CELEBRATING **25 YEARS** OF ACHIEVEMENTS

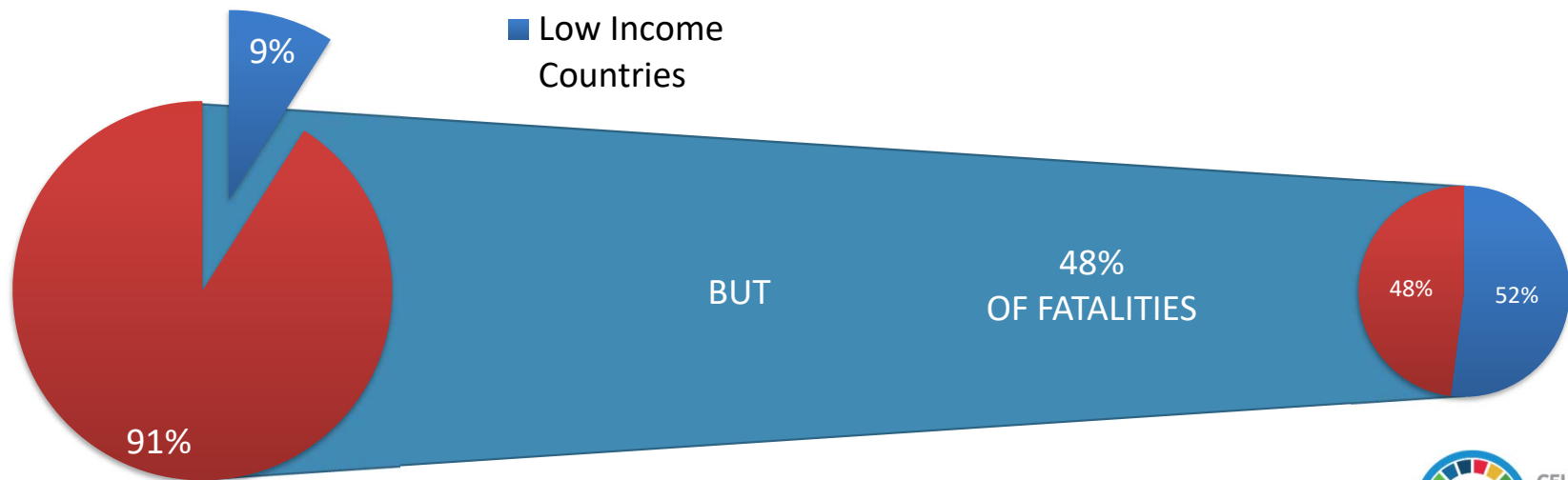


DISASTERS AFFECT EVERYONE



but they impact poor and vulnerable the most

LOW INCOME COUNTRIES ACCOUNT ONLY FOR 9% OF THE WORLDS DISASTERS ...

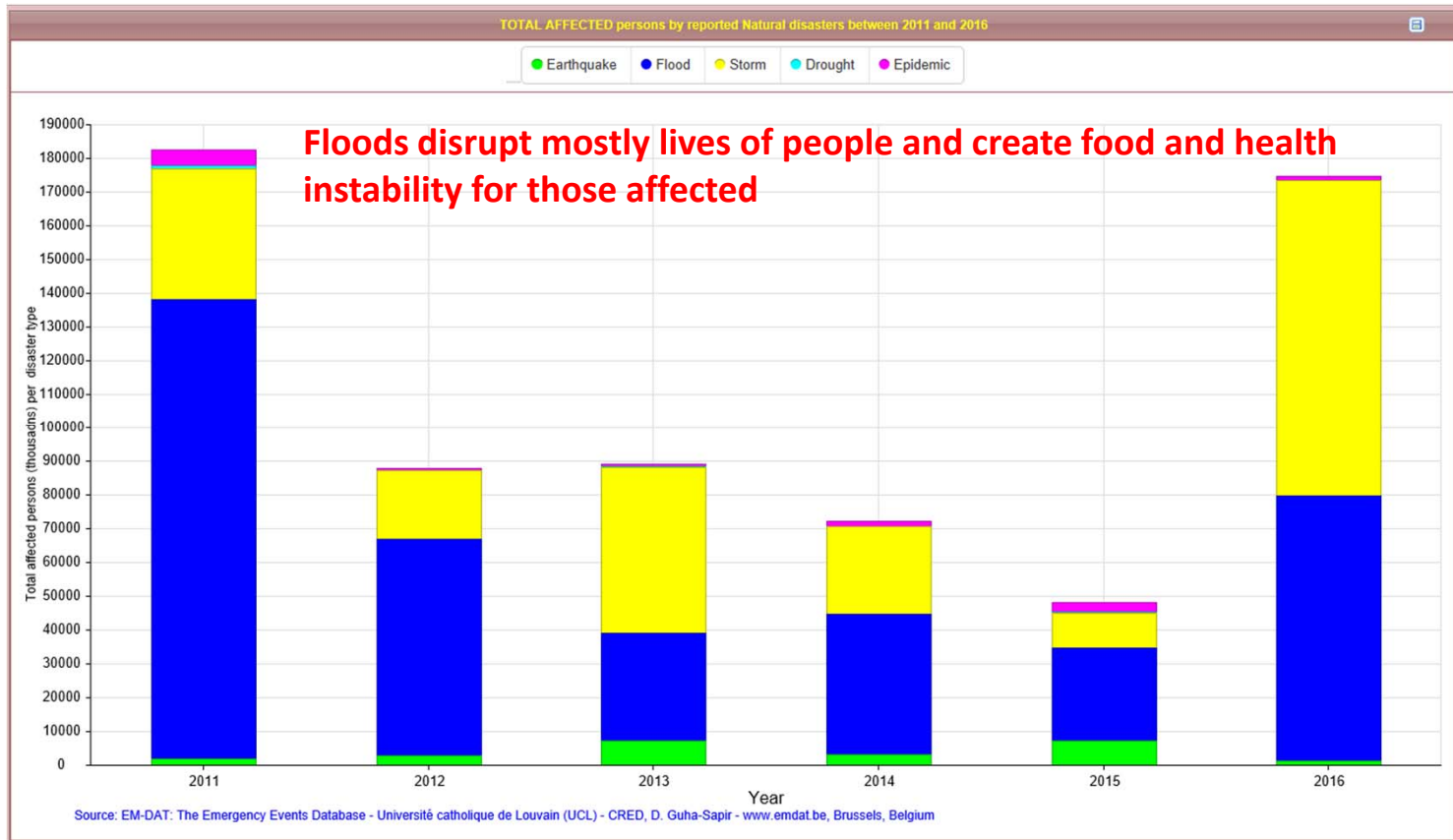


Source: WB, <http://siteresources.worldbank.org/EXTSDNET/Resources/Sendai-Brochure-Map2.pdf>



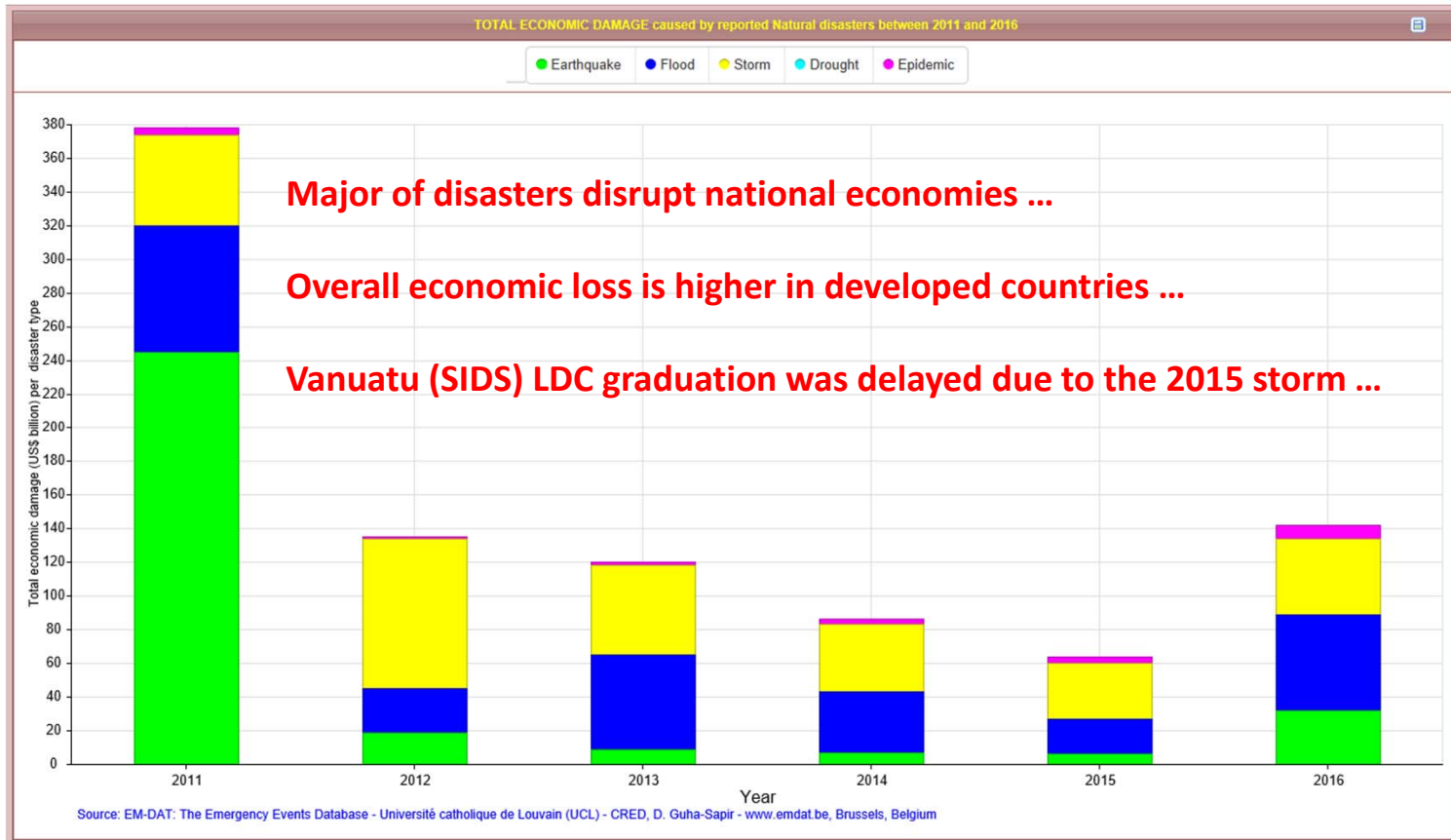


Affected Population (2011-2016)





Economic Losses (2011-2016)





Role of Telecom Regulators - General

• **Regulate**

- Improve and manage market environment

Facilitate

- Enable other national socio-political objectives (i.e. SDGs)

Promote

- Promote investment in ICT sector

Arbitrate

- Mediate disputes and issue resolutions



Telecom Regulators in DM

Coordinate

- Well connected to all national stakeholders for emergency situations
- Have in place working mechanisms and agreements with other national and international entities.

•Regulate

- Ensure the sector is resilient and compliant to standards and best practices related to disaster management requirements
- Implemented National Emergency Telecommunication Plans
- Ensure that MNOs have in place BCP and DRP

Facilitate

- During disasters are prepared and respond fast to the needs of disaster response community with licensing and frequency allocation
- Facilitate importation of emergency telecommunication equipment

Innovate

- Establish new processes to tackle needs of emergency responders during times of crisis
- Use technology for information sharing and communication with all stakeholders



Prevention

Functions

- Development of national emergency telecommunication plans
- Network coverage and management plans
- Improve resiliency of ICT/Telecommunications infrastructure based on hazard and vulnerability risk zones
- Continuous coordination with Network and Service Operators on DRR and risk management
- Implementation of standards in required areas of operation
- Establish agreements and MoUs with stakeholders for better prevention and preparedness against disasters



Examples – Partnerships and Capacity Building



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Welcome to the ITU Workshop on Emergency Telecommunications and Disaster Relief website. This workshop will take place at ITU Headquarters (ITU Tower building, Popov Room) in Geneva, Switzerland on **Tuesday, 27 September 2016**, from 14:30-17:30 in conjunction with the [ITU-D Study Group 2 Rapporteur Group meetings](#), and will proceed the [ITU-D Study Group 2 Question 5/2](#) (Question 5/2 - Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response) meeting.

* If you wish to participate in the workshop and your are an ITU member, please create your account and register through your designated focal point for the ITU-D Study Group 2 meetings [here](#).

* If you are not an ITU member but wish to participate in this workshop, please contact the ITU-D Study Groups Secretariat at: devsg@itu.int.

We express our appreciation to the
Ministry of Internal Affairs and Communications (MIC) of Japan
for its support



[Return to main ITU-D Study Group 2 meeting website.](#)

Samoa And WFP Launch First Regional Workshop To Bolster Emergency Telecommunications For Disaster Resilience In The Pacific

Published on 08 July 2016

SHARE +

Apia, Samoa – Emergency responders and telecommunications experts from across the Pacific are converging in Apia on 11-13 July to discuss ways to improve emergency communications for disaster, at the first regional workshop of its kind jointly hosted by the Samoan Government and the United Nations World Food Programme (WFP).

Representatives of regional and national bodies from Vanuatu, Solomon Islands, Fiji, Tonga and Samoa will gather over three days to share knowledge and define best practice in communications before, during and after a disaster. The workshop will include delegates from Government ministries responsible for communications and information technology; National Disaster Management Offices; the private sector; and academic institutions such as the University of the South Pacific. Members of the Pacific Community (SPC), the Pacific Island Telecommunications Association, the Red Cross and the United Nations will also present regional initiatives.

Pacific Workshop on National Emergency Telecommunications Plan (NETP)

[YOU ARE HERE](#) [HOME](#) > [ITU-D](#) > [REGIONAL PRESENCE](#) > [ASIA & PACIFIC](#)

The Pacific ICT Regulatory Resource Centre (PIRRC) in collaboration with the Telecommunications & Radiocommunications Regulator of Vanuatu (TRR), the Emergency Telecommunications Cluster for the Pacific (ETC), and the International Telecommunications Union (ITU) organized a Pacific Workshop on National Emergency Telecommunications Plans (NETP) during 15-16 May 2017 at the National Convention Centre, Port Vila, Vanuatu.

The workshop addressed regional support for the development of NETPs in Pacific Islands Countries and looked to developing a guideline/template for developing the NETP.





Preparedness

Functions

- Implement of national emergency plans and standard operating procedures
- Establish clear processes and procedures in the areas of emergency communication
- Introduce new technologies to deal with disaster situations
- Communicate objectives to the MNOs and other stakeholders for an incoming disaster



Example – use of drones for infrastructure planning and resiliency assessment



Drones are mostly used for:

- Situation Awareness, Reconnaissance, Surveillance
- Structural Inspection
- Search and Rescue
- Initial Damage Estimation





Response

Functions

- Conduct or coordinate initial damage assessment of telecommunications/ICT infrastructure
- Report on services and networks availability
- Coordinate response undertakings
- Coordinate initial recovery of services in the affected areas and wider.
- Oversee implementation of the disaster response plan for telecom sector



Examples: Telecom regulators – assist others during emergencies

- In 2016 ITU deployed resources to FIJI – the Telecom Regulator provided the equipment to National Disaster Management Office of FIJI and Telecom Service Providers for disaster response and early recovery
- In 2015 ITU deployed resources to Vanuatu – the telecom regulator distributed equipment to various agencies in need
- In 2015 ITU deployed resources to Nepal – the Regulator supported the disaster response community to import equipment and provided them licenses for operations
- In 2016 ITU deployed resources to Ecuador – the Ministry of Telecommunications and Information Society along with the Regulator, supported the importation of telecommunications equipment for all the response community arriving by air and sea
- In 2016 ITU deployed resources to Haiti – the Regulator, CONATEL, helped all response community to import equipment and provided them with licenses for operations



Recovery

Functions

- Detailed damage and needs assessment
- Formulate Infrastructure reconstruction plan
- Initiate and oversee the network reconstruction/rehabilitation
- Record and communicate lessons learnt



Prevention



Considering Standards for Disaster Management

- ITU-T L.92 - [Disaster management for outside plant facilities](#)
- All ITU-T [L-Series Recommendations](#)
- ITU-T X1303 – [Common alerting protocol \(CAP 1.0\) – 2007](#)
- ITU-T X.1303bis – [Common alerting protocol \(CAP 1.2\) – 2014](#) – in force
- Other relevant standards – from ISO, IEC, OASIS, relevant to DRP/BCP, protection of human life, property, infrastructure, economy and environment.

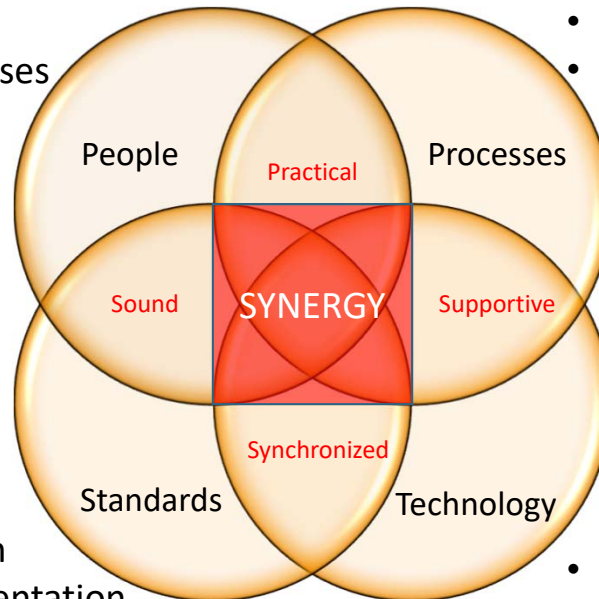




Effective and Efficient Approach

- Education
- Capacity building
- Training and exercises

- Process development
- Process evaluation
- Process re-engineering



- Standards research
- Standards implementation
- Implementation evaluation

- Technology Assessment and Evaluation
- Technology Implementation
- Selecting right technologies

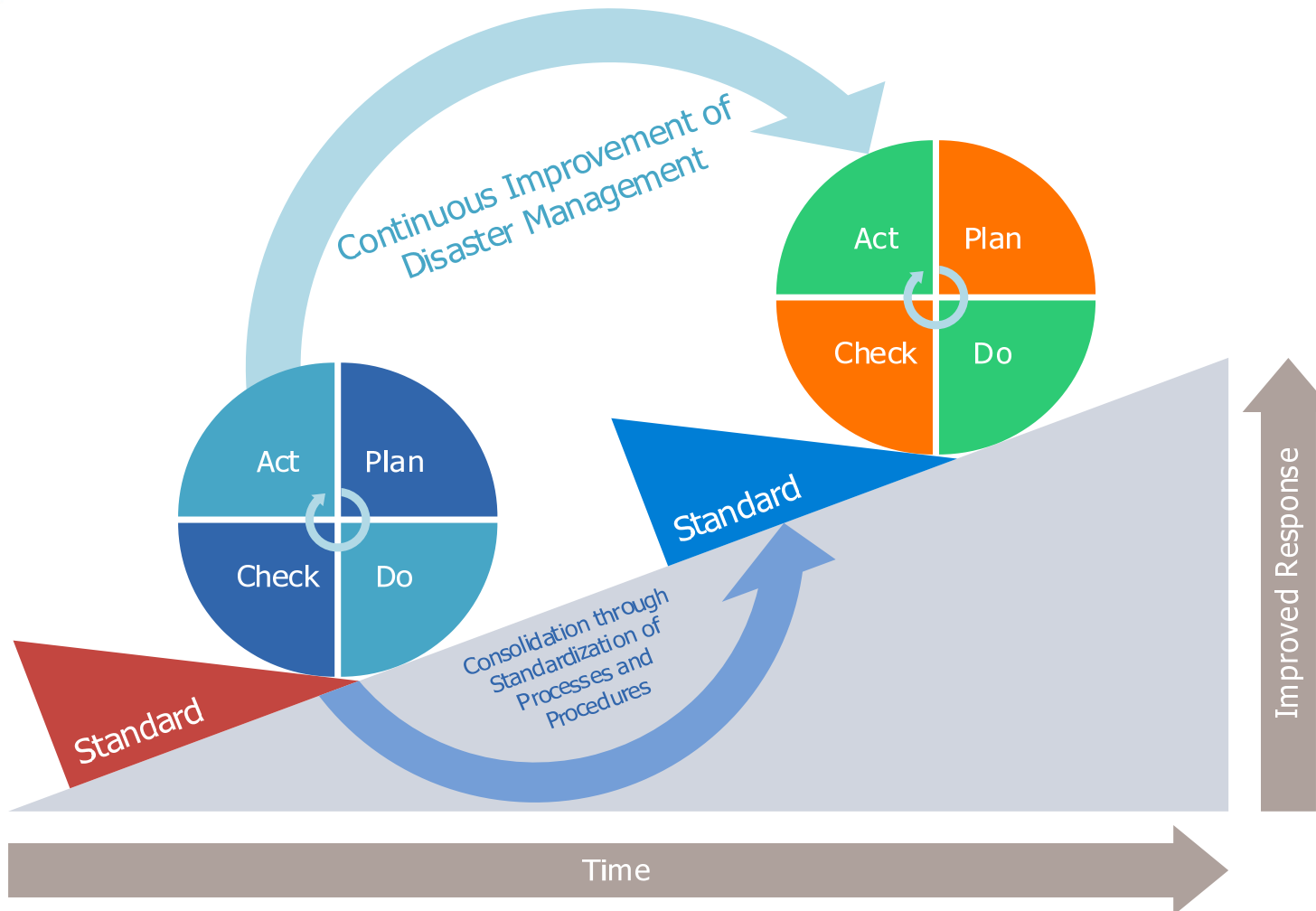


Continuous improvement is a path



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not a destination



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THANK YOU

