



from an ITU Perspective

CAP Implementation Workshop, 17-18 October 2019, Mexico City, Mexico



ITU Membership

 Specialized United Nations (UN) Agency for Telecommunications/Information and Communication Technologies (ICTs).



2018 was the fifth hottest year on record...

The Present is Warmer than the Past

Difference from 1980-2015 annual mean, (°C)



1880 - 2018

Source: NASA Earth Observatory







In 2018

- 315 disasters
- Over 68.5 million people affected
- Over **132 billion** USD in economic losses



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

ICTs are a critical enabler for disaster management and risk reduction activities as they help to monitor hazards and delivering vital information to all parties involved in disaster management, including the most vulnerable populations and communities at risk.

1 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

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



Despite the considerable progress made in advancing access to ICTs and early warning systems worldwide, reaching vulnerable groups in societies continues to be a challenge.

- Lack awareness about the importance and benefits of early warnings
- Lack of national multi-stakeholder teams and coordination among them
- Lack of financial resources to invest in early warning and alerting systems
- Lack of strong public/private partnerships to help address those challenges
- Lack of community involvement for better understanding of alerts and warnings





Disasters continue to remain a key challenge for the achievement of the United Nations Sustainable Development Goals (SDGs).

International Agenda

• 2030 Agenda for Sustainable Development



- The Paris Agreement of UNFCCC
- The <u>Fifth Assessment Report</u> and a <u>Special Report on Global Warming</u> of the <u>Intergovernmental Panel on Climate</u> <u>Change (IPCC)</u>



ITU's Work in Emergency telecommunications

- **Resolution 136** (Rev. Dubai, 2018) of the Plenipotenciary Conference (PP-18), on the use of telecommunications/information and communication technologies for humanitarian assistance and for monitoring and management in emergency and disaster situations, including health-related emergencies, **for early warning**, prevention, mitigation and relief.
- **Resolution 34** (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC-17), on the role of telecommunications/ICT in disaster preparedness, **early warning**, rescue, mitigation relief and response.
- WTDC-17 also includes several regional initiatives focusing on emergency telecommunications:
 - Asia-Pacific (ASP5): on Contributing to a secure and resilient environment;
 - Arab States (ARB1): on Environment, Climate Change and emergency telecommunications;
 - Americas (AMS1): on Disaster risk reduction and management communications;
- Resolution 646 (Rev. WRC-15) of the World Radiocommunication Conference (WRC), on public protection and disaster relief
- **Resolution 647** (Rev. WRC-15) of the World Radiocommunication Conference, on Radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters.













International Telecommunication Union

ITU-T



TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

SERIES X: DATA NETWORKS, OPEN SYSTEM COMMUNICATIONS AND SECURITY Secure applications and services – Emergency communications

Common alerting protocol (CAP 1.2)

Recommendation ITU-T X.1303 bis



Awareness raising & capacity building

- Capacity building workshops & training on drills and exercises
- Emergency telecommunication/disaster management events
- Guidelines on national emergency telecommunication plans, CAP as best practice

Better coordination with different partners

- Through ITU Membership: Telecommunication/ICT policy makers, regulators, private sector
- With UN Organizations working on ET, including the ETC and WMO
- ITU Study Group Question <u>5/2</u>: Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response
- Monitoring progress in CAP implementation



- CAP pre-event workshop during 3rd Global Forum on Emergency Telecommunications. Over 90 participants.
- CAP side event during the Second Multi-hazard Early Warning Conference. Over 50 participants
- Session on Best Practices on using CAP during the workshop on Drills and Exercises. Over 55 participants



The CAP standard is being leveraged worldwide to greatly improve emergency alerting so that people at risk receive timely and appropriate messages that enable them to take early actions in protection of lives and livelihoods.

A major challenge is to help developing countries to better take advantage of the CAP standard, through coordinated, cross-agency efforts at outreach, education of communities, and the sharing of expertise.



Projects on early warning should be based on a multi-phase, multi-hazard, multi-stakeholder and a multi-technology approach







Thank you

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