



GLOBAL EMERGENCY TELECOMMUNICATIONS FORUM MAURTIUS, 6-8 MARCH 2019

Cosmas L. ZAVAZAVA

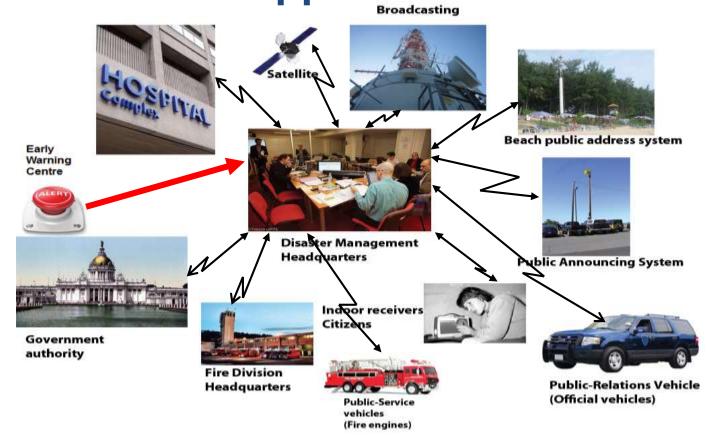
Chief of Department, Projects and Knowledge Management, ITU



- The NETP is an integral part of the National Plan on Disaster Management (NPDM)
- It describes the management arrangements for Telecommunications/ICT activities in support of National Disaster Management efforts as defined in the NPDM (to include Standard Operating Procedures, Strategies and Mechanisms) for ensuring effective response to disaster or emergency situations.

# Multi-hazard and technology neutral approach







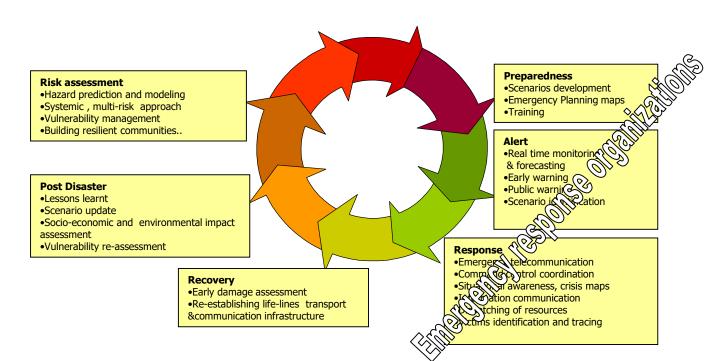
#### Principles for the development of an NETP

- Adopt a strategy addressing all potential hazards which the nation is exposed to
- Ensure there is awareness and stakeholder participation
- Include training, drills and evaluation of telecom/ICT infrastructure covering all phases of disaster management
- During the implementation of the NETP, there is need for accurate assumptions about potential disasters
- Standard Operating Procedures should identify the types of communications/technologies that are required for a given type of an emergency



#### **NETP** and Disaster Management Phases

The NEPT discusses arrangements for the planning and deployment of telecommunications resources at all stages of disaster management and thus covers the entire disaster management cycle including climate change mitigation and adaptation:



#### **Prevention and Mitigation**



- Establish legal and regulatory frameworks in support of emergency telecommunications and ICT
- Identify critical telecommunications infrastructure
- Carry out risk analysis of critical telecommunications infrastructure
- Take measures to reduce telecom network vulnerability



#### **Preparedness**



- Formulate emergency telecommunications response plans in coordination with the national authority for emergency management
- Allocate radio frequency to relevant entities
- Enter into bilateral and multi-lateral partnership agreements and memoranda among stakeholders
- Integrate telecommunications/ICT infrastructure into early warning systems and ensure that last mile solutions are provided





#### **Preparedness (2)**

- Maintain inventory records/databases of human, financial, technical (taking into account issues related to interoperability and prioritization of calls), and material resources.
- Embark on a vigorous educational campaign to raise public awareness of the role and use of telecommunications/ICT for disaster management
- Educate first responders and conduct regular drills
- Establish and equip Emergency Operation Centres (EOC) and the Emergency Coordination Centre (ECC) for telecommunications
- Draw up ET Business Continuity Plans (BCP)







- Carry out an audit of telecommunications infrastructure to assess telecommunication needs
- Ensure that Emergency Telecommunications teams work closely with the designated disaster management entity and that resources are deployed where most needed
- Mobilize additional resources from other entities as required e.g. radio amateurs, private sector, etc,
- Ensure the availability of communication links at all times taking into account the deployment of the business continuity plan



#### Response (2)

- Respond to requests by national and international humanitarian organizations for assistance in the deployment of telecommunications resources (licensing incoming equipment and allocating requested frequencies)
- Provide appropriate telecommunications equipment or services for search and rescue officials, and for those providing services such as medical care, shelter, relief, distribution of food, water supply, etc.

#### **Emergency Telecommunications Response Operating Procedure EMERGENCY SITUATION OR DECLARATION NO RISK** LOW RISK **RISK EVALUATION IMMINENT REQUEST** INITIATE CONTACTS CONTACT ALL EXPERTS – FAN OUT ACTIVATE EMERGENCY RESPONSE PLAN AND EOC IF APPLICABLE REQUEST FOR ASSISTANCE PROVINCE OR NATIONAL **CRITICAL** INTERNATIONAL **STATE** DEPARTMENT INFRASTRUCTURE ORGANIZATION EVALUATE THE REQUEST AND, IF APPROPRIATE, PREPARE A RESPONSE



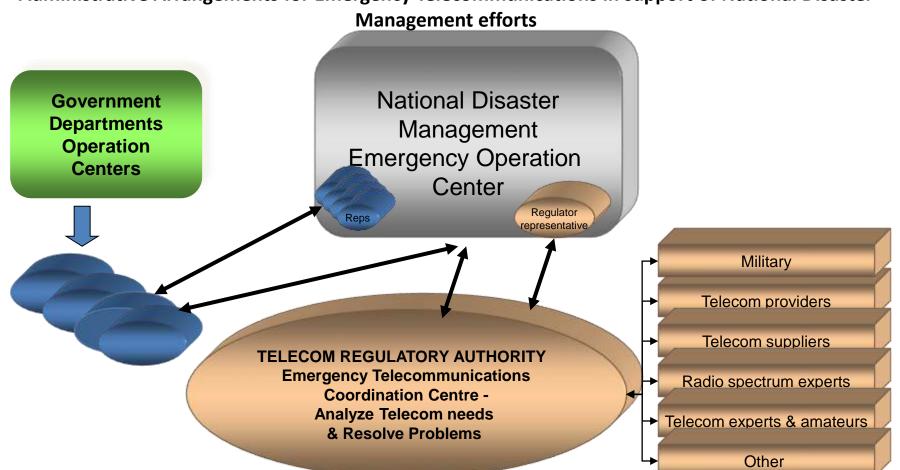
#### RECOVERY

- Rehabilitate damaged critical telecommunications infrastructure ensuring resilience and reducing vulnerability (make use of such applications as geographical information systems)
- Ensure coordination with providers of telecommunications infrastructure and services in order to attain synergy
- Provide expert advice to government authorities with respect to telecommunication infrastructure and other related projects during the reconstruction phase



#### OVERVIEW OF HOW IT COULD BE DONE...

Administrative Arrangements for Emergency Telecommunications in support of National Disaster



# ABOUTTHE ... GUIDELINES

**Chapters 1-10**: Fundamentals of NEPTs

**Chapter 11**: Step by Step drafting of NETP

Annex 1: NETP Template (Appendices:1-10)

**Annex 2**: Emergency Communication Checklist

- **Preparedness** (Administration and responsibility setting, External coordination, Training, Infrastructure and Technology
- Response, Relief, and Restoration (Communications Channels and Information Sharing, Infrastructure and Technology, Evaluation of damage/ICT assessment, Establishment of emergency connectivity, maintenance and re-establishment of networks



Geographic maps depicting the likely locations of possible disasters should be developed and included in the NETP



This is critical for the analysis of telecom/ICT infrastructure risks and contingency plans, as well as for determining the type of warning systems needed.



#### **CONCLUSIONS**

## THE GUIDELINES PROVIDE NINE RECOMMENDATIONS



- The NETP should include a description of disaster
  management phases based on the disaster risk management
  plan adopted within the country and describe how
  telecom/ICT will be helpful in each of the phases.
- A well-developed NETP should take into account the different mechanisms available for international cooperation for disaster risk management e.g. UNISDR, ETC, ITU, OCHA, and others.



- The NETP should include a description and reference to all international cooperation and coordination treaties and bilateral agreements that the country has signed regarding disaster management. In particular, countries are encouraged to adhere to the Tampere Convention and to ensure effective implementation
- There should be a well defined administrative structure involving all stakeholders both national and international



- The NETP should include clear administrative structures, processes, and communication protocols, essential to the successful implementation of the plan, taking into account the specific needs, laws, regulations, institutions and other characteristics specific to the country, including the national disaster risk management plan.
- Telecom/ICT facilities are essential to the management of operations before, during and after an emergency and disaster events.



- The NETP should contain information on all existing telecom/ICT networks; a vulnerability and risk analysis of all telecom/ICT networks; and network contingency plans for when emergencies and disasters occur.
- Early Warning Systems should be designed and deployed, linking all hazard-based systems when possible to take advantage of economies of scale; An inventory of such systems should be included in the NETP and periodically reviewed and updated.



- Legislation and regulation regarding telecom/ICT for disaster management should be in place and described in the NETP. Such legislation must provide general high-level guidance on the development of the NETP, while still allowing flexibility during its construction and implementation
- Telecom/ICT regulation regarding temporary licensing, type approval, import/export of equipment, frequency allocation, network redundancy and priority call routing, among others.



- The NETP must include a mechanism for enhancing training and capacity building for both the administrators leading emergency responses and the wider community using telecom/ICT. Includes practice drills, training, tests and other exercises
- Account of people with specific needs and marginalized groups should be taken into account



- The NETP should include multiple forms of telecom/ICT for the dissemination of warning alerts, which are key to bringing messages to people with disabilities and marginalized communities.
- NETP must be periodically reviewed and updated after every three years if no drill and operation take place.



- NETP should include multiple forms of telecommunication/ICT for alerting
- NETP should take into account and respond to everyone's needs
- NETP should be reviewed and updated periodically

