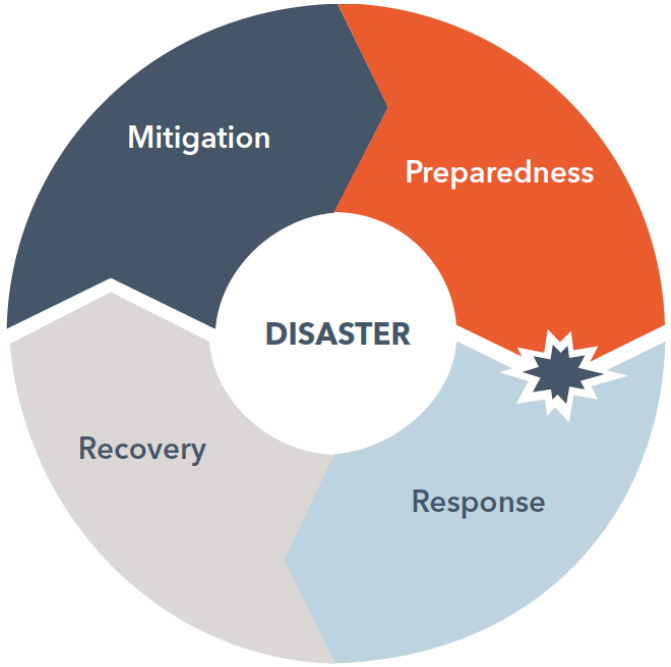
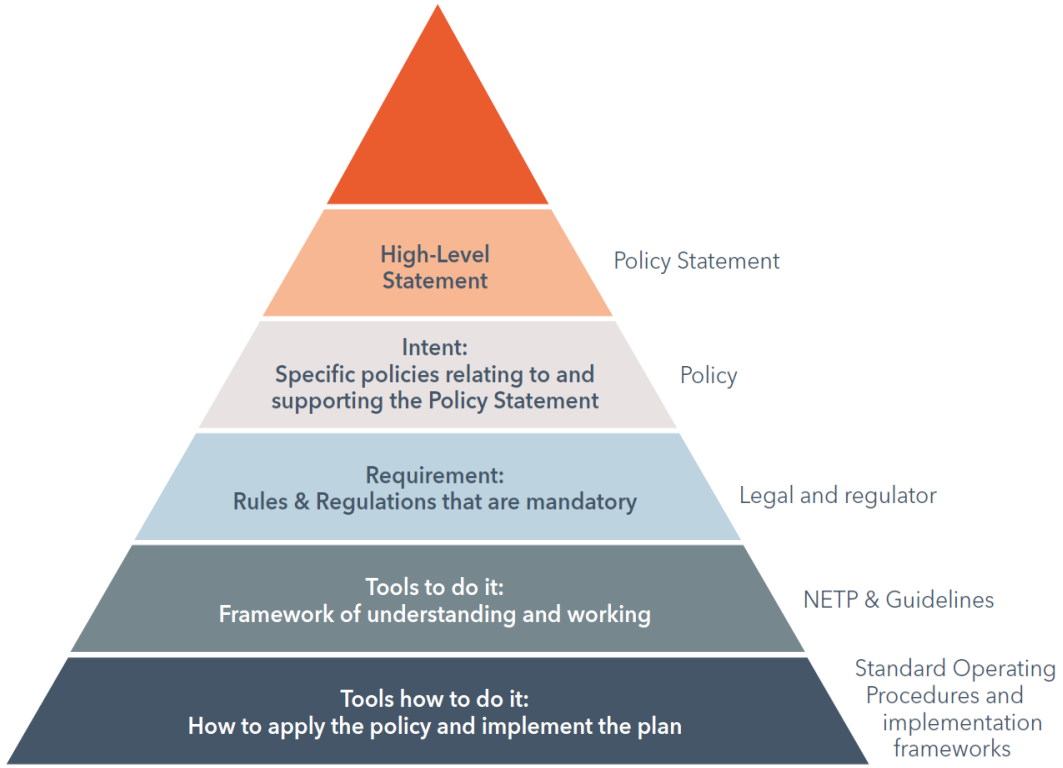
National Emergency Telecommunication Plans





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Agenda – National Emergency Telecommunication Plans (NETP)

- Strategy and Importance
- Principles
- Benefits
- Implementation
- Challenges
- Way Forward
- Creating an Enabling Environment
- Create an Enabling Response Environment
- Create an Enabling Response/Recovery Environment
- Examples

National Emergency Telecommunication Plans (NETP)

A NETP is a strategic plan for how to respond to threats and hazards by promoting communication and information sharing across all levels of government, within communities at risk, and between public and private organizations.

Importance

- Better coordination for disaster management
- Creates processes and procedures to identify national needs on ET
- Establishment of multi-stakeholder roles and responsibilities
- Supports development and implementation of policy and legislation requirements on ET
- Carries out risk analysis of critical telecommunications infrastructures and establishes disaster recovery plans and procedures
- Creates a framework for national consultation and cooperation on emergency telecommunication
- Brings together people and resources towards common objectives

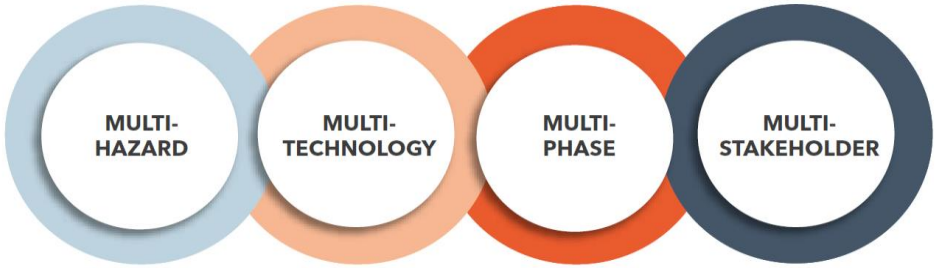
Principles of a NETP

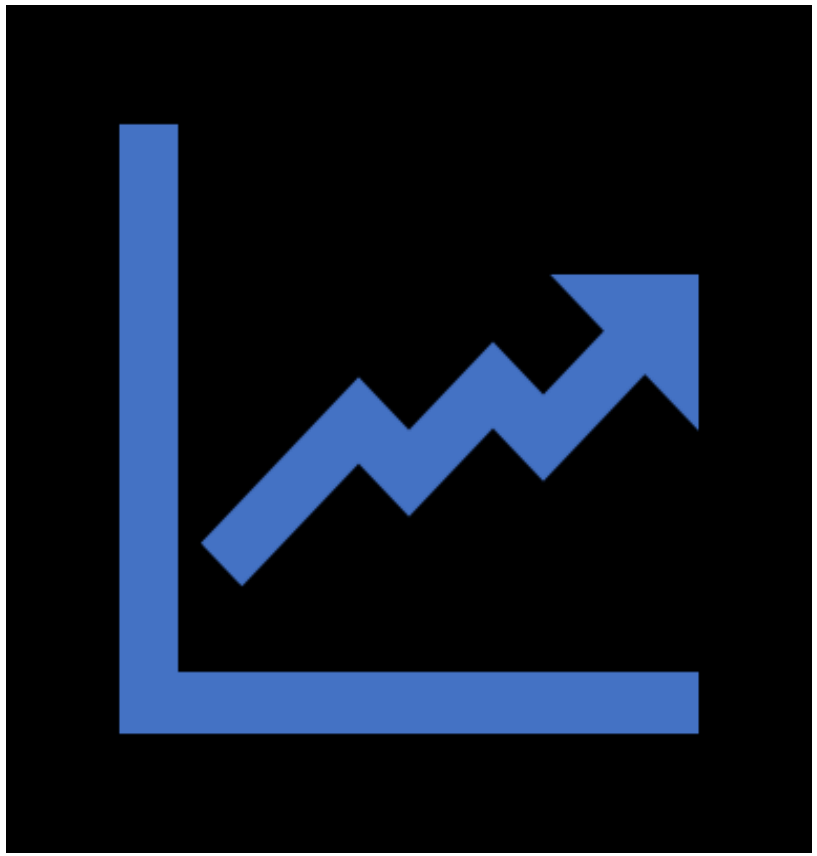
- ***MULTI-HAZARD**:* providing the necessary means and linkages for mitigating disasters irrespective of their nature.

- ***MULTI-TECHNOLOGY***: promoting the use of any form and means of telecommunications that can contribute to enhance coordination in disaster management activities.

- ***MULTI-PHASE***: allowing the use of ICTs at all stages of disaster management that will contribute to enhance capacity to respond to disasters and reduce vulnerability of people.

- ***MULTI-STAKEHOLDER***: communicating all parties and stakeholders at the rural and local communities, the central government, the private sector, civil society and International Organizations, among others.





Benefits

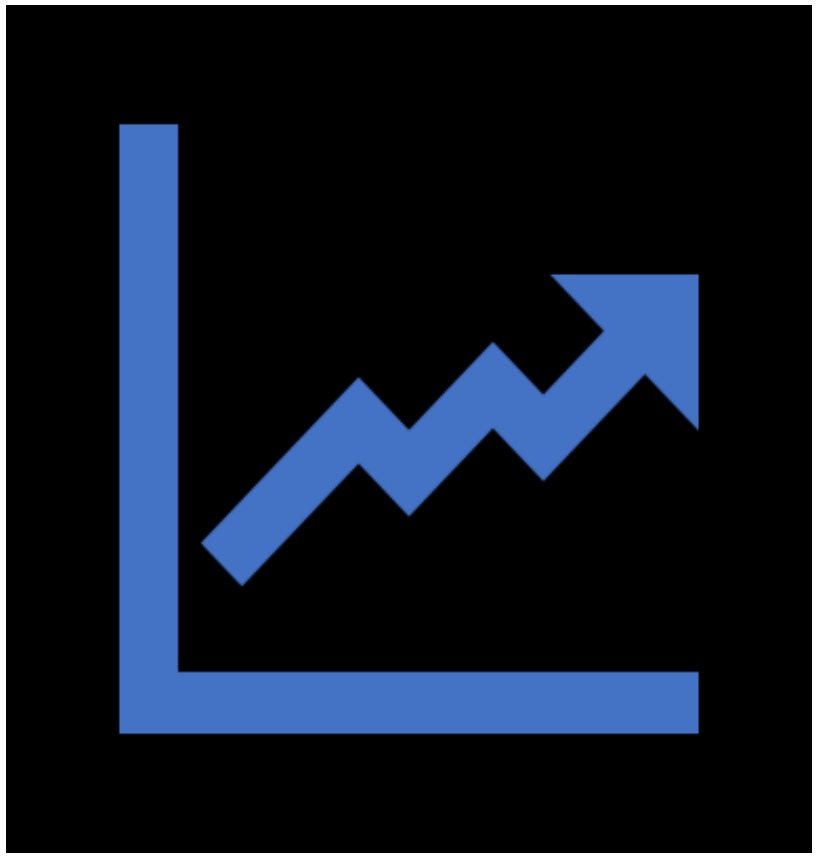
- Better national coordination for disaster management
- Reduced duplication of efforts
- Enhanced operational procedures
- Reduced loss of lives and economic impact
- Better budget allocation

NETP - Implementation

- The national emergency telecommunications plan (NETP) should be an integral part of the national plan on disaster management.
- The NETP involves all stakeholders that work on disaster management and humanitarian assistance including the private sector and international entities.
- Ensures that every organization is aware of the communications procedures and availability of the resources
- Ensures continued consultation and coordination among national stakeholders
- Puts in place legal and regulatory frameworks of ICTs including international treaties such as the Tampere Convention.

Challenges

- Lack of technical capability, skills and know-how
- Lack of awareness on the benefits
- Lack of political support to develop and implement the NETP
- Difficulty in establishing a **committed** multi-stakeholder community
- Availability of financial and human resources
- Lack of partnerships



Way Forward

- Raise awareness on the importance of developing and implementing NETPs
- Establish partnerships on national and international level
- Ratification and implementation of Tampere Convention
- Enabling environment for NETP development and implementation

Creating an Enabling Environment

- A NETP should have a strong high-level commitment from the government in charge of designing and implementing the plan
- Create a legal and regulatory frameworks that will provide the norms and rules to all parties involved in its development and implementation
- Resource allocation (human and financial) to deliver and maintain the required results
- Establish deadlines to achieve different tasks and follow up on actions
- Develop standard operating procedures

Creating an Enabling Environment

- Identify critical telecommunications infrastructure and carry out risk analysis
- Take measures to reduce telecommunication network vulnerability
- Enter into bilateral and multi-lateral partnership agreements with different stakeholders at a national and international level
- Integrate telecommunication/ICT infrastructure into early warning, monitoring and alerting systems and ensure that last mile solutions are provided
- Embark on a vigorous education campaigns to raise public awareness of the role the telecommunications play in disaster management

Creating an Enabling Environment

- Establish and equip Emergency Operation Centers (EOC) with the correct telecommunication services and technologies
- Conduct regular emergency drills and exercises to verify the telecommunication systems capacity to provide connectivity during emergency situations
- Ensure interoperability between all telecommunication systems
- Maintain inventory records/databases of human, financial, technical resources
- Hold different meetings throughout the year to help build strong working relationships between stakeholders

Create an Enabling Response Environment

- Ensure a coordination meeting takes place immediately after the emergency event (at the EOC)
- Carry out an audit of telecommunications infrastructure to assess telecommunication needs on the ground and at a local level
- 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, ex. Radio amateurs, private sector, etc.
- Always ensure the availability of telecommunication links
- Respond to requests by national and international humanitarian organizations requesting assistance in the deployment of telecommunication resources such as licensing, incoming equipment, allocation of frequencies, etc.
- Provide appropriate telecommunications equipment or services for search and rescue operations and for those providing services such as medical care, shelter, relief, distribution of food, water, etc.

Create an Enabling Recovery/Rehabilitation Environment

- Carry out a damage assessment of the telecommunications infrastructure
- Rehabilitate damaged critical telecommunications infrastructure ensuring resilience.
- Ensure coordination with providers of telecommunications infrastructure and services to continue building strong synergies
- Make use of international organizations that can help providing expert advise to government authorities with regards to telecommunication/ICTs infrastructure and other related projects that would benefit the reconstruction phase

EXAMPLES

Example of a Legal Framework

SUPREME DECRET
No. 030-2007-MTC
THE PRESIDENT OF THE REPUBLIC
CONSIDERING:

- That, article 75 of the Single Order Text of the Law of Telecommunications, approved by Supreme Decree No. 013-93-TCC, establishes that it is a function of the Ministry of Transport and Communications, among others, to set the telecommunications policy to follow and control their results;

- That, article 19 of the Consolidated Text of the General Regulations of the Telecommunications Law, approved by Supreme Decree No. 020-2007-MTC, provides that in the event of a situation of emergency or local, regional or national crisis, such as earthquakes, floods or other similar events that require **special attention from operators of telecommunications services**, these will provide the telecommunications services that are necessary, giving priority to support actions leading to the solution of the emergency situation. For this purpose, the holders of concessions and authorizations will follow the Ministry provisions;

...

DECREE

Article 1º.- Approve the Communications System in Emergency Situations, which is constituted by:

- Special Communications Network for Emergency Situations.
- Prevention Guidelines.
- Guidelines for Action in Situations of Emergency.
- Guidelines for Action in the Affected Areas.

The provisions that regulate the System above indicated are included in the Annex that forms integral part of the present supreme decree.

- Article 2- include Article 258 of the Text Sole Order of the General Regulation of the Law of Telecommunications, the following:
  "Article 258º.- They constitute very serious infractions, in addition to those typified in article 87 of the Law, the following:
  (...)
  10. Failure to comply with each of the obligations foreseen in the norm that approves the System of Communications in Emergency Situations"
- Article 3 - Include section 3.5.1. Structure numbering for basic services of the Fundamental Numbering Technical Plan, approved by Supreme Resolution No. 022-2002-MTC, the following:
  "3.5. Numbering structure of Specials Services
  3.5.1 Numbering structure of Specials Basic Services
- (...)
  119 Emergency - Voice Messaging
  Mandatory service provided by concessionaires of mobile public services and local fixed Telephony, to users in emergency situations. This number will be used to record a short voice message and the telephone number of the person who is in an emergency situation. It will also allow recovering, by other users, the voice message registered by the person who is in an emergency situation. They are not priced to the user. "

- Article 4 - The present Supreme Decree will be endorsed by the Minister of Transport and Communications and will become effective the day after its publication.

COMMUNICATIONS SYSTEM IN EMERGENCY SITUATIONS

TITLE I
GENERAL DISPOSITIONS

Article 1 – Purpose
Article 2- Scope of application
Article 3- Definitions

TITLE II
SPECIAL COMMUNICATIONS NETWORK IN EMERGENCY SITUATIONS

Article 4 - Special Communications Network in Emergency situations
Article 5 - Independence of the Network

TITLE III
PREVENTION GUIDELINES

Article 6 - Implementation and authorization of the emergency number for voice messaging
Article 7- Obligation to share information and diffusion
Article 8 - Obligation of the entities that provide relief in emergency situations
Article 9 - Drills

TITLE IV
ACTION GUIDELINES IN EMERGENCY SITUATIONS

Article 10 - Duration of calls
Article 11 - Gratuity of calls to emergency services
Article 12 - Obligation of assistance of carriers
Article 13 - Obligation of broadcasters
Article 14 - Cooperation with amateur radio

TITLE V
ACTION GUIDELINES IN THE AFFECTED AREAS

Article 15 - Affected areas
Article 16 - Installation of Infrastructure and Provision of terminal equipment
Article 17 - Free calls
Article 18 - Modification of technical characteristics

TITLE VI
REGIME OF PROMOTION OF THE AMATEUR RADIO

Article 19 - Equipment
Article 20 - Payment by right of authorization, renewal and change of category
Article 21- Payment by annual fee

TITLE VII
REGIME OF INFRACTIONS AND SANCTIONS

Article 22- Infractions and sanctions

TRANSITORY DISPOSITIONS

First - Deadline for the design of the special network for communication during emergency situations
Second – Deadline for the implementation of the special network for communication during emergency situation

COMPLEMENTARY AND FINAL PROVISIONS

First- Entity in charge of monitoring the compliance of the obligations provided in the supreme decree
Second - All the provisions established for the amateur radio should be applied to the requests that are in process

Example of Drills and Exercises

In order to minimize the impact of disaster, it is necessary that all stakeholders involved in the management process knows exactly what to do. This requires repeated exercises or drills. Planning and execution of these exercises has to be based on the experience of real scenarios, it has to involve main stakeholders, and the performance has to be evaluated.

The drills have to be performed frequently to ensure that no one forgets the processes.

Different types:

1. Tabletop exercise (TTX):
2. Drill
3. Functional exercise
4. Full-scale exercise

Example of Drills and Exercises

Tabletop Exercise (TTX)

It is a basic exercise that provides the opportunity to discuss a hypothetical simulated emergency. It is conducted in a low tress environment with participants seated around a table. This exercise can become more complex by incorporating unexpected developments to the simulated emergency.

Example of Drills and Exercises

Drill

It is a facilitated and supervised activity, in which specific operations, functions or systems are tested. A drill involves mobilization of resources, making it different to the tabletop exercise.

Example: testing sirens, community awareness, evacuation routes, etc.

Example of Drills and Exercises

Functional exercise

It is a fully simulated interactive exercise that tests the capability of an organization to respond to a simulated event. In this type of exercise, participants will experience real pressure and time constrains, providing a more realistic practice when responding to disasters.

Multiple functions (mobile networks, broadcasting networks, etc.) of an emergency plan will be tested.

Example of Drills and Exercises

Full-scale Exercise

This type of exercise is intended to evaluate the operational capability of emergency management systems in a highly stressful environment, simulating real response conditions. This type of exercise requires a large amount of resources and coordination.

It usually involves multiple agencies and participants physically deployed in an exercise field location. It aims to test almost all functions of an emergency plan.

Example: Evacuation of population due to a tsunami alert.

All telecommunication systems will be tested, roads, meteorological agencies, broadcasting, shelters, etc.

Example of Drills and Exercises

Evaluation of exercises

This activity is the most important part of an exercise. It provides the opportunity to share the challenges and strengths of the simulation. It gives provides feedback on the areas that need to be improved, adjusted or completely changed.

All participants should be aware of the results of the evaluation exercise.

THANK YOU